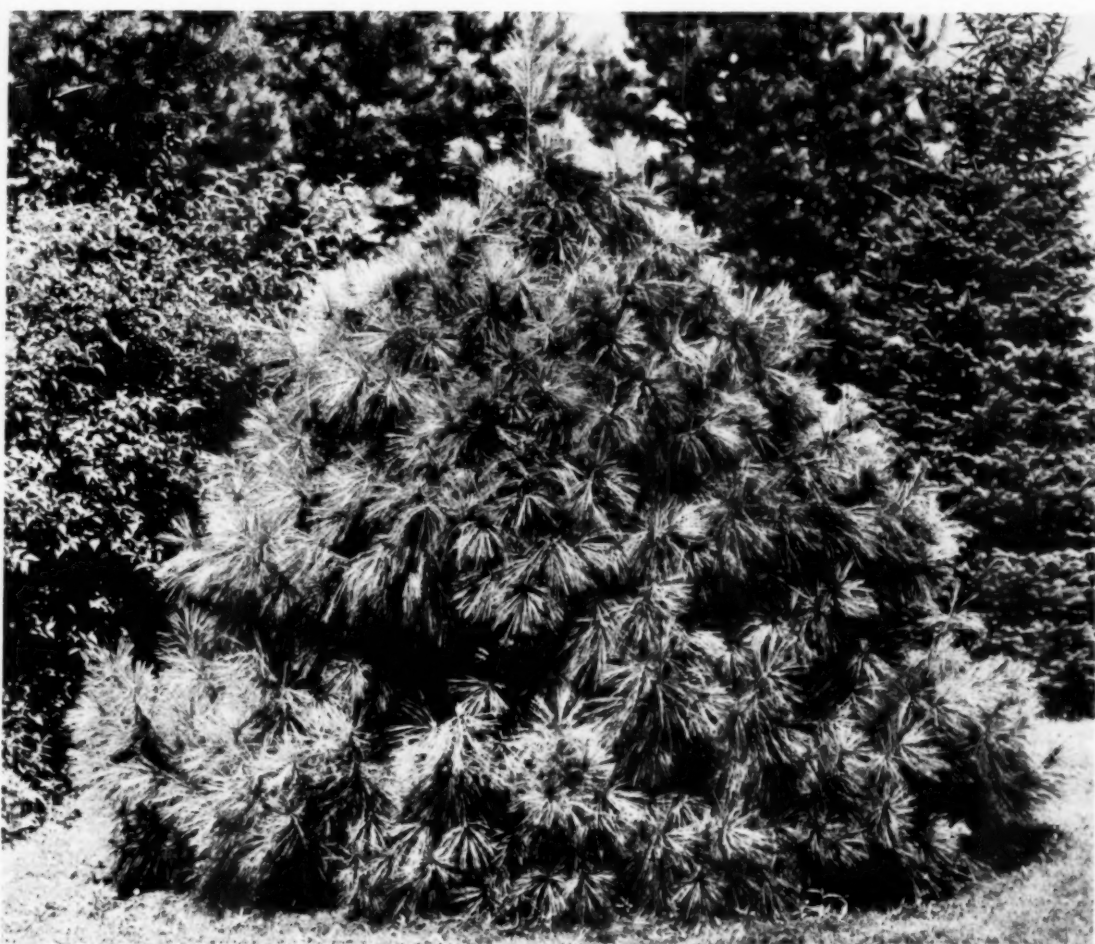


AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

DECEMBER 15, 1948



Pinus Griffithi (Excelsa)

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SEEDS

TREE—SHRUB—PERENNIAL
FLOWER—VEGETABLE

HERBST BROTHERS
92 Warren St., New York 7, N. Y.

OF AGRIC. AND APP. SCIENCE
Correspondence with seed collectors and growers invited.

Free catalog "Seeds for Nurserymen."



SEASON'S GREETINGS

And our very Best Wishes for another prosperous year.

Business continues to be very good. Income in agriculture and urban areas remains high. Thousands of new homes are being built and thousands more are being remodeled. Farmers' interest in beautifying their homesteads, in planting windbreaks and in planting for soil and wild life conservation is at an all-time high. Our industry is in the enviable position of enjoying unprecedented demand with no important surpluses which might force prices to an unprofitable low level.

We are in position to help you get your share of this profitable business. While some items may be in short supply, our assortment is still quite complete. Let us quote on your want lists.

I and my co-workers here at Mount Arbor thank you for your business and wish you a Happy Christmas and the best of health and good cheer all the New Year!

E. S. Welch, President

Mount Arbor Nurseries

Shenandoah, Iowa

AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

VOL. LXXXVIII, No. 12

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Forms for the January 1 issue will close Monday, December 20.

Mail copy to arrive at Chicago by that date—or earlier.



SEASON'S GREETINGS

FROM ALL OF US
TO ALL OF YOU



C. R. BURR & COMPANY, Inc.

Manchester, Conn.

"Growing Since '98"



AMERICAN NURSERYMAN

F. R. KILNER, *Editor and Publisher*

Joan L. Kilner, *Assistant Editor*

Editorial

MERRY CHRISTMAS!

Looking back over the year which is drawing to a close, one cannot but be cheered by the change from its immediate predecessors. Relief from the difficulties and tension of wartime, to speak of no more, has been accompanied by an improvement in the social and business life of nearly all of us. While we may think about the old days, or wonder about a return to normal, there can be no question that the year has been marked by favorable progress. Perhaps we are going in a new direction, but most of the road shows signs as of old, enough to give a comfortable feeling.

The nursery industry still feels the momentum of the impetus given home gardening in wartime. The demand for plants to adorn the many new homes being built is felt in increasing degree. Public interest in horticulture was never so great in this country, and it is being fostered by more agencies, and more actively, than ever before.

In the forward progress of the industry this magazine has shared through the interest and aid of its readers. Their ideas and their contributions to the reading columns have added to the enhancement made possible by the increase in circulation and advertising volume. Gratification over the year past and the outlook in the year ahead gives good reason to wish every reader of this page a Merry Christmas.

WORTHY EXAMPLE.

In its monthly bulletin to members on public relations, the American Association of Nurserymen tells of a series of gardening lectures given by the president of the association which, by instructing and encouraging local amateurs, served as a fine example of nursery promotion that might be duplicated in other communities.

The adult education department of the North Tarrytown high school asked the A. A. N. president, Howard C. Taylor, who is proprietor of the Rosedale Nurseries, East View, N. Y., to conduct a course in landscape gardening. A single announcement in a local paper brought an immediate response, forty persons signing for the course. Starting in mid-March,

The Mirror of the Trade

the course continued over a period of nine weeks—one night per week—with classes held at North Tarrytown high school. Each weekly session was devoted to a different topic, including spring treatment of established lawns, new lawns, preparation of planting beds, rose gardens, fruit gardens, design of small home plantings, useful varieties of trees and shrubs, annuals and perennials, plus a final inspection visit to Mr. Taylor's nursery for the identification of varieties. He reports that the course turned out to be a big success, and his class—equally divided between men and women—was enthusiastic.

Not only was the community benefited, but Mr. Taylor reports that



his adult students were at his nursery between lectures purchasing plants which he had recommended during the preceding lecture. Similar service has been performed, with some profit, by nurserymen in other communities. It is one which can be followed in many localities.

WHAT THE PUBLIC WANTS.

Every nurseryman has seen the effect of a gardening fad or of special public interest in a particular plant. Nearly every season there comes a deluge of public queries for some plant because of favorable publicity in the garden press at a particularly propitious time. If the nurseryman is in short supply of the item, or finds it hard to obtain, he may advance the price—and he is usually surprised to see how much the market will bear.

Rock garden plants were in that category for a while, a couple of decades ago. More recently, dwarf fruit trees became so much in request that editors of garden magazines and nurserymen themselves dreaded seeing the mention in print for fear of the resultant inquiries, in the face of

the scant supplies. Nut trees, particularly of new types or strains, furnish other examples.

Less well known is the recent case of *Rosa multiflora japonica*, thorny type, for farm hedges. When this was advocated to replace Osage orange hedgerows a few years ago, several enterprising individuals undertook to grow in quantity the type of plant desired for this purpose, but the influence of the state conservation departments was laggard in moving the stock. Then this year several magazines of large national circulation among farmers and sportsmen published lengthy and glittering stories about the plant. Some of the enterprising individuals mentioned above had meanwhile lost interest in the project and let their plantings go; the small quantity of stock left was soon sold out. How many inquiries were generated is not known, but the American Nurseryman, which had nothing to do with the publicity given the plant in the general magazines, has received dozens of requests for sources of supply.

What the public wants seems to be what is currently uppermost in its interest, whether it be television sets or nut trees. Price seems to be no object if the public's appetite is whetted sufficiently; more than one nurseryman has observed this fact with amazement. So when an item of nursery stock begins to get in long supply, it might be better business to see if the public's appetite can be stimulated by special publicity before sharpening the pencils to mark prices down.

NEWSPAPER AD MATS.

The nurserymen who also engage in the florists' business will be interested in a service to the trade just offered by the public relations committee of the Society of American Florists in the form of newspaper advertising mats of small size designed to meet the needs of the average retailer. Twenty-six subjects are included, in the form of 3-inch single-column advertisements, with prominent artwork and brief copy. A folder showing the twenty-six mats can be obtained from the office of the Society of American Florists, 600 South Michigan avenue, Chicago 5, Ill., or a check or money order for \$19.50 will bring the twenty-six ad mats. They are designed for the holidays and other times when flowers are particularly in request.

First Steps in Cost Accounting

By James S. Wells

While it is true to say that the successful nurseryman is an individualist and his business is essentially a personal one, the impact of new ideas, new methods of production and new concepts of business planning can be seen on every hand. Yet with all this rapid advancement, it is in the realm of statistics, accurate records and cost accounting that we are most backward.

Almost without exception, the average nurseryman does not know exactly what it costs him to produce the plants he sells. It is being realized, however, that this is a state of affairs which cannot be allowed to continue, for practically every phase of operation is at the present time affected by the rapid increase in costs. In the past, working under more or less stable economic conditions, one was able to establish a reasonably accurate balance (that time had proved to be profitable) between the cost of production and the selling price. But today a setup which might be working profitably in spring can be completely out of balance by autumn, and therefore it becomes of immediate importance to be able to establish, rapidly and accurately, the cost of the many and varied operations which are carried out by the nursery-

man in his everyday work. How is this to be done?

It will readily be seen that it is far from easy to arrive at a system which is reasonably accurate, not complicated to operate and can be carried out by the average type of man employed on the nursery. We believe that we have evolved a system which satisfactorily covers these various points.

At Koster Nursery, we employ an average of from thirty to forty persons continuously throughout the year. These men are divided into two fairly clear-cut sections—those of the inside gang, who work in the greenhouses and potting shed and do most of the highly skilled work associated with the large-scale propagation of high-grade nursery stock, and members of the outside gang, who combine with the propagating section to deal with the planting and the cultural care of the plants in the field. Lifting and dispatch of orders at lifting time are also their responsibility. This outside gang is usually composed of not more than ten to twelve men and is increased seasonally by casual labor to take care of the rush of work. Both sections are controlled by separate foremen, who are responsible directly to me as general manager. This then is the setup

for which we had to devise a cost-accounting system.

The first point which was abundantly clear was that in order to carry out any scheme one man would be required to deal with the time-keeping, to punch the time cards and to make detailed notes of the time spent by each man on the various jobs of the day. It was manifestly impossible for the two foremen to exercise the necessary close control and direction over the labor and, at the same time, deal with the collection of data and writing involved in any system of this kind. Accordingly, a man was specially employed for this job of timekeeping, and we found that he was well able to take care of our requirements, the two foremen giving a certain amount of help and direction as necessary.

Before going farther it will, no doubt, be of value if we quote verbatim the final setup of codes which we use in this system and then proceed to explain how these are used in practice.

CODE FOR PLANTS.

ACER (Maples)—AC.—All types.
AZALEAS — AZ. — All types: Kurume, Ghent, mollis, kaempferi.
BIOTA — BI. — Berckmans, elegantissima and conspicua.

KOSTER NURSERY OPERATING ACCOUNT

Dogwood

1948

DATE	TODAY	TO DATE	SEED			GRAFTS			CUTTINGS			LINERS		1ST YEAR		2ND YEAR		B & B	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Brought Forward		\$15.37 61		\$1.31 65	\$4.57	\$8.31	\$71.96	\$34.71				131	\$10.37	\$01.37	\$8.13			\$3.67	\$51.00
July 10	3.27	\$5.42.88		8.27															
July 14	4.2	\$5.63.50		.62															
July 17	1.61	\$5.65.11						1.61											
July 19	.67	\$5.68.78		.27															
July 20	9.78	\$5.75.56		9.78															
July 21	11.87	\$5.87.43		11.87															
July 22	23.65	\$6.11.10		17.27															
July 23	20.37	\$6.31.47		8.55										6.36					
July 24	7.36	\$6.38.83		6.28										11.81					
July 26	13.24	\$6.52.07													1.08				
July 27	13.24	\$6.65.31												13.24					
July 28	8.52	\$6.73.83												13.24					
July 29	1.36	\$6.75.19		1.36										9.52					
July 31	4.37	\$6.81.56		1.89														2.10	
Aug 9	6.01	\$6.87.57		6.01															
Aug 10	3.68	\$6.91.25																	
Aug 14	5.88	\$6.97.13																	
Aug 16	5.14	\$7.02.27																	
Aug 17	5.14	\$7.07.41																	
Aug 18	7.36	\$7.14.77																	
Aug 19	5.88	\$7.20.65		4.88															
Aug 20	13.24	\$7.33.89		13.24															
Aug 21	8.01	\$7.41.90		7.96															

Example of running operating account system developed at Koster Nursery by which an accurate cost figure may be determined for any plant at any stage in its development, from seeds to B & B plants.

DOGWOOD—D.O.G., D.O.C., D.O.B.—White, pink, double white, pendula, kousa.

EVERGREENS—E.V.—All coniferous evergreens grown from either seeds and cuttings which are not otherwise accounted for. Such as all thuja, chamaecyparis and also ilex.

GENERAL—G.—Any plants not specified.

JUNIPER—J.U.G., J.U.C.—All types grown, both from cuttings and grafts.

LILACS—L.I.—All varieties.

MAGNOLIA—M.G.G., M.G.C.

PIERIS—P.I.

PRIVET—P.R.

RHODODENDRONS—R.H.G., R.H.C.—All types, understocks and grafted.

SPRUCE—S.P.

TAXUS—T.A.—All varieties.

OPERATING ACCOUNTS.

SECTION 1.

SEEDS.

1. Collect; clean; prepare seedbeds, frames or flats; sow; cover; mulch with salt hay.

SECTION 2.

SEEDLINGS.

2. Weed, water or irrigate; hoe; spray; general cultural care.
3. Prepare soil; fill flats; spot; prepare beds; transplant into beds.

SECTION 3.

GRAFTS.

4. Prepare potting soil; lift, sort, trim, pot, heel in and shade; bring in; clean pots; prepare for grafting; gather and trim grafts; dip grafts; lift roots for root grafting.
5. Grafting.
6. Cultural care; setting up; spraying; watering; fumigating; turning over; cutting off understocks; hardening up; setting back under peat; sterilizing greenhouses; waxing and packing lilacs in boxes; putting into cold storage.

4B, 5B and 6B—Budding.

SECTION 4.

CUTTINGS.

7. Prepare greenhouses or frames.
8. Gather, make, treat, stick, restick or lift cuttings for replanting.
9. Lift and transfer cuttings into other greenhouses (azaleas) or lift and pot cuttings (rhododendrons and magnolias).
10. Cultural care. Weed, spray, fumigate, cultivate, trim, put into deep frames.

SECTION 5.

LINERS.

11. First year: Prepare beds; include here lowering soil level in frames; cut strings; lift and pack into flats in readiness for planting; plant (either grafts, cuttings or seedlings); shade.
12. Cultural care; weeding, hoeing, irrigation, spraying, top-dress.
13. Cultural care—second year.

SECTION 6.

B&B.

14. Preparation of the land, spreading manure, plowing, disking, fertilizing, general cultivations to prepare for planting.
15. Planting.
16. Cultural care; cultivations, top-dressing, spraying, irrigation, etc., and all field operations.
17. Lift and replant.

GENERAL.

18. Lift, pack and ship, haul by truck.
19. Manure: Clear stables, stable costs,

steers, silo, pea vines, hay, straw, feed, pasture fence.

20. Land maintenance and rebuilding: Clear land, sow cover crop, sow fertilizer (if land is not being planted), repair waterways, mowing.
21. Repairs and maintenance to buildings and equipment: Carpenters, make shades, boiler, all tools and equipment, repairs to roads, ashes, etc.
22. New construction: Frames, waterways, anything completely new.
23. Supervision.
24. Miscellaneous: Office, contracting, sick and vacation, haul coal, load and haul trash, inventory, general cleanup, haul water, shovel snow, unload pots, spread rat poison, any small experimental plots or plants.
25. Monthly running accounts.

The use of the code letters to designate certain types of plants was devised mainly to abbreviate and to eliminate writing. It will be seen that the code is extremely simple and is, of course, open to alteration or elaboration to suit any particular local requirements. We considered it important, however, to have separate accounts for most of the important types of plants which we grow, for it is not correct to assume that what it costs to produce one type of grafted plant will apply to all others propagated in the same way. We have also differentiated between propagation by cuttings and by grafting, where both operations apply to a certain type of plant, as, for instance, in junipers, magnolias and rhododendrons. Generally speaking, it will cost much less to produce a plant from a cutting, and we wished to know accurately what each cost would be. We grow many more types of plants than those shown, but it was felt that none of the others was at this time of sufficient importance to warrant a separate account, and they have therefore been grouped under the code GENERAL. As and when conditions suggest the necessity, it is a simple matter to make a separate code letter and account for any plant on which we feel we should like to have accurate figures.

Now as to operating accounts. When we sat down to draft a schedule covering all the different operations involved in our work, we found that they dropped into six clear-cut and natural divisions. Each one of these divisions represented a point at which we could, if we so wished, sell the product involved.

For instance, let us consider *Cornus florida* as an example. An operating account for this item is shown on page 7. First we collect the seeds, which may be sold. Seeds kept for our own use are cleaned, beds are prepared and seeds are then sown to produce understocks for grafting *Cornus florida rubra*. All operations

involved in the production of the understocks are grouped under **SEEDLINGS**. It will be noted that many more operations are grouped under this heading than are required for the dogwood, but with such plants as *Picea abies* (Norway spruce), the seedlings will require transplanting before they come to grafting size. At the end of section 2, again, the seedlings may be sold as understocks, or they may be prepared for grafting on the nursery. This operation of grafting and all the work involved in the production of a bench graft are grouped in section 3. After grafting, the plants may be sold as bench grafts, or again may be planted out on the nursery for a year until they are sold as 1-year liners. Section 4 deals with propagation by cuttings, and at the beginning of section 5 all the plants which have been propagated either by grafts or by cuttings come together as 1-year liners. An account number is included here to cover any cultural care on these plants during their second year, should they remain in the beds for that length of time before being finally planted into the open fields. The last section, number 6, deals with the planting and care of the 2-year liners in the field until they reach B&B sizes.

It will be seen, therefore, that if one has accurate figures for any given plant, spread over the six sections here outlined, it is comparatively simple, by adding together as many of the sections as apply, to arrive at an accurate cost figure for any plant and at any stage in its development. Then follow eight general accounts, covering operations on the nursery not closely associated with any of the sections given. These are self-explanatory, except only number 25. This number has been included to allow small amounts which occur daily on different jobs to be held in suspense by the timekeeper, and these are then totaled once a month and applied to the account concerned. This saves many daily entries of small amounts and is a great saver of time and effort, yet without reducing accuracy.

We now come to the operation of this system day by day. A daily report sheet is filled in by the timekeeper, for both the inside—or greenhouse—group and the outside nursery group.

A report for August 20 is shown by the illustration on the opposite page. Each man is shown on this list by both name and number, and space is available against each man for two entries in both the morning and the afternoon. This allows the foremen to move the men to different

jobs without reference to the timekeeper, whose job it is to record any such changes accurately. We bring out one line to illustrate how the system works.

9030 K. Miyake. Half an hour was first spent on AZ12, this being the cultural care of the 1-year-old azalea plants in beds in the field. Four hours were then spent on 19, which related to the filling of the silo with corn. (We are not particularly interested to know what he was doing in this instance, but the charge is placed against the cost of producing manure.) Then five hours were spent on RH2, this being the care of this year's crop of Rhododendron ponticum seedlings, now in the greenhouses. In the afternoon one and one-half hours were again spent on the rhododendron seedlings, while two and one-half hours were charged to miscellaneous, this meaning that he was doing perhaps a small job or jobs, not directly chargeable to any one plant.

This shows how the time is recorded each day, for each man and each job. A similar form as that shown is made for the outside gang, and the two are brought in to my office each evening. The daily record, in code, is kept permanently on file and serves as a valuable point of reference from year to year when comparing the various operations of plant propagation. A duplicate copy of this daily report is then sent to the timekeeping office, where the data are taken off and entered into the various running accounts kept for all the named plants and also for the twenty-five numbers on the operating accounts. This can be understood more clearly from the illustration on page 7, from the current running account for *Cornus florida rubra*. On this can be seen the items of expenditure from day to day and the total amount spent, and then in the extended columns one can see directly where this total amount has been used. With the use of these accounts it is quite clearly a simple matter to arrive at the cost to date for any of the various operations involved in the production of any plant. At the end of the season, or at any time we may determine, we can arrive at an accurate unit cost of production, simply by taking the total at the bottom of the "To Date" column and relating this to our inventory. If the unit cost so obtained is unusually high, we have ready at hand a complete analysis of the cost to enable us to go over each phase of production and see just where our costs are out of line.

Now we shall, of course, have a certain amount of unseen costs which are not accounted for in this schedule, items such as light, heat, power, administration, insurance, etc. And these, together with the totals of all the general accounts, numbers 18 to 24, will have to be allocated propor-

tionately among the various plant accounts, taking into consideration the total amount of inventory. With the addition of the proportional amount of hidden costs to the basic unit cost already determined, we should have our actual cost of production, covering all phases of our operation, and upon this we can then base our fair selling price.

While the full value of this system from a cost of production point of view will not be seen until we have at least twelve months' figures, it does have an immediate value as a method of making spot checks on any particular operation in the whole sequence of production.

Each day production figures are

FRIDAY
AUGUST 20, 1948

NO.	NAME	NO. OF CUTTINGS	NO. OF PLANTS	NO. OF SEEDLINGS	NO. OF POTS	NO. OF BUDS	NO. OF FLOWERS	NO. OF FRUIT	NO. OF SEEDS	NO. OF OTHERS	NO. OF TOTALS
9001	Ready	5	10								
9002	L. J. J. J.	5	10								
9003	Jack Blum	5	10								
9004	T. J. J.	5	10								
9005	A. J. J.	5	10								
9006	A. J. J.	5	10								
9007	A. J. J.	5	10								
9008	A. J. J.	5	10								
9009	A. J. J.	5	10								
9010	A. J. J.	5	10								
9011	A. J. J.	5	10								
9012	A. J. J.	5	10								
9013	A. J. J.	5	10								
9014	A. J. J.	5	10								
9015	A. J. J.	5	10								
9016	A. J. J.	5	10								
9017	A. J. J.	5	10								
9018	A. J. J.	5	10								
9019	A. J. J.	5	10								
9020	A. J. J.	5	10								
9021	A. J. J.	5	10								
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9096	A. J. J.	5	10								
9097	A. J. J.	5	10								
9098	A. J. J.	5	10								
9099	A. J. J.	5	10								
9100	A. J. J.	5	10								

Example of daily report form used at Koster Nursery showing how time is recorded for each man and each job.

noted by the timekeeper for any operation to which such figures apply. For instance, if cuttings are being made or plants potted, the total cuttings made or units potted are noted, and the following day I receive a report on the unit cost of the previous day's work on the cuttings or whatever the job may be. If I consider this is too high, I am able at once to go into the matter and perhaps change some operation to increase efficiency.

An instance occurred recently which clearly illustrated the value of our system. We have figures available as to the cost last year of gathering, making and inserting our azalea cuttings, and we know that this cost was approximately one-half cent each.

The past spring we had to increase the wages we pay to all the workers on the nursery, and we were, therefore, particularly anxious to know what the unit cost of the operation would be this season. At the end of the first day's work on making azalea cuttings this was at once worked out, and we found that we had been able to absorb the increase in wages and yet still lower the unit cost of production to approximately .0039 of one cent each. Careful checking each day has shown that this figure has been maintained, and on the total block of 220,000 cuttings made this year we have, first, absorbed the 9 cents per hour increase in wages and, second, saved a total of \$390 in the total cost as compared with last year. This illustrates in a practical manner the value of these records.

Our system has only been running since last January, and its full value will not be seen for at least eighteen months. We believe, however, that at the end of the first year we shall have data which will enable us to check accurately our costs of production on most of the main items which we grow, and we intend to use this information in compiling our lists and selling prices.

This outline must of necessity be brief, but if any grower finds the ideas presented to be of interest and would care to write to me direct, we shall be glad to elaborate in anyway we can and to give the fullest possible information on the methods we use.

NEW BITTERSWEET.

A new strain of bittersweet, named *Celastrus scandens steffeki*, for its discoverer, Edwin F. Steffek, was introduced this fall at the harvest show of the Massachusetts Horticultural Society. Unlike most strains, it is completely self-fertile and does not need the presence of another plant in the vicinity to bear fruit. Likewise, it is reported to have borne not only large crops of larger-than-usual berries but it has done so consistently over a period of more than fifteen years. It was given an award of merit by the Massachusetts Horticultural Society.

NEW PLANT PATENT.

The following plant patent was issued recently, according to Rummeler, Rummeler & Snow, Chicago patent lawyers:

No. 810. Rose plant, Leslie D. Tuttle, Pasadena, Calif., assignor to the Tuttle Bros. Nurseries, Pasadena. A variety of rose plant, characterized by the shadings of the petals of the buds and open rose flowers, which are, respectively, begonia-pink and shrimp-red shades, shading to straw-yellow at their base and tips, and further characterized by the fact that the flowers have fewer petals than the parent Picture rose.

Leaf Patterns of Cotoneasters

By F. C. Galle and E. E. Nank

Several years ago, while both writers were graduate students at Ohio State University, a hobby was started of collecting leaves of various ornamental plants. The collection grew, and finally, after a suggestion from Prof. L. C. Chadwick, of the department of horticulture, four genera of plants were mounted on large charts for classroom and display purposes.

The four groups collected were cotoneasters, with twenty-two species; oaks, with twenty-eight species; viburnums, with thirty-eight species, and maples, with nineteen species.

Specimens were not available so that leaves of all species could be collected; however, many of the more common plants of each genus were represented. The collection was gathered from seven states and included specimens from parks at Rochester, N. Y., and Cleveland, O.; the Arnold Arboretum, Jamaica Plain, Mass., and the arboretum and campus of Ohio State University.

In nearly all species represented the leaves were not taken from the same plant, but it was planned to show some variation in plants of the species. The leaf or branch on the right of each group was turned to show the underside.

The cotoneaster is the first genus to be discussed. Similar treatment of other genera will appear in subsequent issues of the American Nurseryman.

The cotoneasters are a valuable genus of the rose family and, because of the beauty of the many varied species, are useful in landscape work.

Although they will tolerate partial shade for a short time each day, they grow better in full sun. They are well adapted to well drained soils of a silty loam texture and one that is only slightly acid to alkaline in reaction.

In general, the culture requirements are simple. They require little pruning except to remove deadwood or to prune into shape. Fire blight is the only serious trouble and causes the dying back of branches. The deadwood should be cut back hard, and the portion removed should be burned.

Propagation is by seeds, cuttings or grafting. Softwood cuttings of most species root readily when handled in hotbeds, and mature cuttings may be handled in the greenhouse. Cotoneasters root best in a semidry me-

dium, and sand is still to be preferred over such materials as vermiculite or vermiculite and peat mixture. Seeds require stratification and should be stored in a moist peat and sand mixture at a temperature of 60 to 65 degrees for one to three months, followed by a period of two to four months of cool storage at a temperature of 35 to 45 degrees. For standards, some types may be grafted on stems of *Crataegus oxyacantha* or *Sorbus aucuparia*.

Low-growing Kinds.

The low-growing shrubs as illustrated herewith are generally adapted for rock gardens, bank covers and foundation plants.

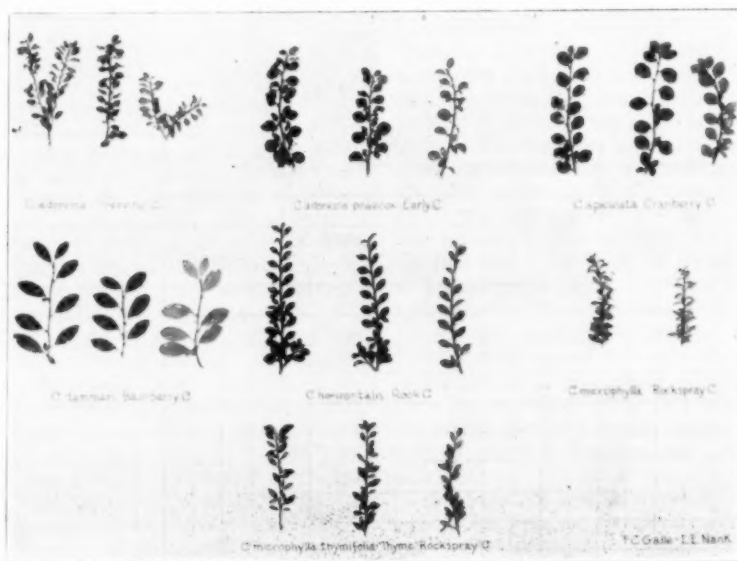
The following is a description of each species shown in the picture.

Cotoneaster adpressa, creeping cotoneaster, is a low, deciduous, creeping shrub, with an irregular branching character. The small, broad, oval leaves, usually one-fifth to three-fifths of an inch in length, are dull green on the upper side and hairy or pubescent beneath and have a wavy margin. The small pink flowers in mid-May to June are followed by bright red fruits one-fourth inch in diameter in August. The plant is semievergreen and hardier than *C. horizontalis* and is a replacement for the latter in northern areas.

Cotoneaster adpressa praecox, early cotoneaster, is a more vigorous plant than the species, with prostrate arching branches. The leaves are larger than the above, one-third to four-fifths inch in length, and are glossy green. The reddish, hairy stems are quite attractive. The flowers are pink, and the red fruits are one-half inch in diameter.

Cotoneaster apiculata, cranberry cotoneaster, is a rapid-growing, deciduous shrub four to five feet in height, with a round, irregular habit and drooping branches. The round, wavy marginal leaves are a dark glossy green and one-third to three-fourths inch in size. The flowers are pink, followed by large, bright red fruits in August and September. The plant is a desirable, low, compact shrub and highly adaptable as a facing or foundation plant. It makes an excellent low clipped hedge and is often used as a standard for formal areas.

Cotoneaster dammeri, bearberry cotoneaster, is a low, evergreen ground cover with trailing branches that take root. The elliptical, oblong, glossy, green leaves are three-fifths to one and one-fifth inches long and light green on the underside. The white flowers are followed by bright red fruits one-quarter inch in diameter in August and September. The

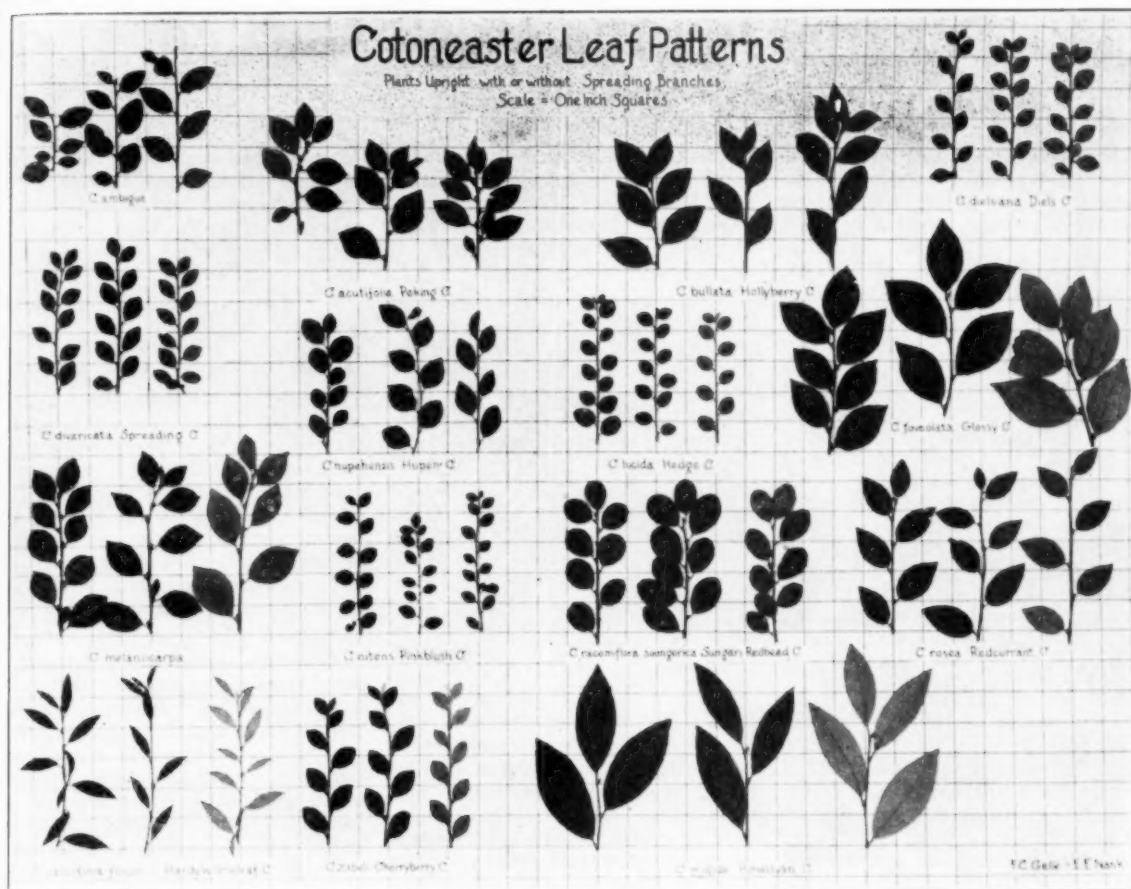


Cotoneaster Leaf Patterns: Low Shrubs, Prostrate or Spreading.

C. adpressa
C. dammeri

C. adpressa praecox
C. horizontalis
C. microphylla thymifolia

C. apiculata
C. microphylla



Cotoneaster Leaf Patterns: Plants Upright With or Without Spreading Branches.

C. ambigua
C. divaricata
C. melanocarpa
C. salicifolia floccosa

C. acutifolia
C. hupehensis
C. nitens
C. zabeli

C. bullata
C. lucida
C. racemiflora soongorica
C. frigidula

C. dielsiana
C. foveolata
C. rosea

plant makes an attractive ground cover with its long trailing branches.

The variety *C. d. radicans*, not shown on the photograph, has smaller, oval leaves and is reported by many to be better than the species.

Cotoneaster horizontalis, rock cotoneaster, is a low, half-evergreen shrub with horizontal, 2-ranked branches. The flat, broad-elliptical, glossy green leaves are one-fifth to one-half inch in size. The pink flowers are quite showy in May, as are the bright red fruits, one-quarter inch in diameter, in September and October. This species has been quite popularly used in rock gardens, along ponds and walls. However, because of its high susceptibility to fire blight in many areas, it is being replaced by other species.

Cotoneaster microphylla, rock spray cotoneaster, is a low, evergreen shrub with wide, spreading branches. The dark, lustrous, green, narrow obovate oblong leaves are one-fifth to one-third inch in length, with a

gray pubescence on the underside. The white flowers in May and June are followed by scarlet fruits one-half inch in diameter in September and October.

Cotoneaster microphylla thymifolia, thyme rock spray cotoneaster, is a smaller, narrow-leaved plant than the species. Flowers and fruit are also smaller. In spite of its smaller characters, it is often considered superior to the species.

Upright Plants—Red Fruit.

Cotoneaster bullata, hollyberry cotoneaster, is a deciduous spreading shrub, reaching six feet in height. The elliptic-ovate to ovate oblong leaves, one and two-fifths to three and one-fifth inches in length, are wrinkled on the upper side and pale or grayish-green on the underside. The pinkish flowers appear in May, and the clusters of bright red fruits, one-quarter inch in diameter, in August and September. This variety is important for its red fruit, but not

so desirable a plant as many others.

Cotoneaster dielsiana, Diels cotoneaster, is a deciduous, upright shrub of six to eight feet, with arching branches. The broad, elliptic leaves are two-fifths to one inch in length, pointed at the end, dark green above and yellow or grayish pubescent beneath. The flowers are pink, appearing in June, and are followed by scarlet fruits one-quarter inch in diameter in September. This arching, branched shrub with its abundant fruits and orange fall foliage is an attractive shrub in the fall and in the past often has been recommended over the more common shrub, *C. divaricata*, because of its greater immunity to fire blight and scale.

Cotoneaster divaricata, spreading cotoneaster, is a deciduous, upright shrub to six feet in height, with spreading branches. The broad, elliptic glossy green leaves are one-third to four-fifths inch in size, lighter

[Continued on page 51.]

Shrubs for the Rock Garden

By George Graves

Rock gardening in its purest sense remains very much a specialist's endeavor. There was a time, about twenty years ago, when the public at large became interested and, without knowing too much about what it was all about, many a householder piled up some stones and planted the heaps with short-statured plants, with not often pleasant results as regards either appearance or sound horticulture. After that, real rock gardening receded to the care of those who understand that rock gardening is the provision of suitable growing situations for plants native to rocky precipice, alpine meadow and scree, usually at positions much nearer sea level. Creeping, dwarf and extremely slow-growing plants from elsewhere also find a useful place in the true rock garden.

Rock gardening is really an undertaking for the gardener who is interested less in creating garden pictures than he is in plants for plants' sake. By turning to plants of small stature, a remarkably large and varied collection of species and varieties can be assembled on a small area. Then, too, the emphasis is not on soil preparation and fertilizing to make for bigger and better growth, because that would call for more space than is available. Rather, the desire of the rock gardener is simply to have representative specimens of the plants which interest him and to keep them alive and growing thriftily. Even at that, what with spreading and seed dropping, some species tend to take over the entire area if not checked.

Obviously, rock gardening is not for the millions, but some of the plants grown in well balanced rock gardens and some of the ideas expressed in rock gardening have far wider usefulness to planters confronted with banks to clothe with woody plants, or underplantings to make among trees and larger shrubs. This general subject has come to be known as the ground cover problem. Some of the 150 or so woody plants available to rock gardeners enter very much into the ground-covering situation. If the field is spread to include bank planting in general, the list of available materials extends, because slightly more rampant shrubs and many of the vines become eligible for use, depending on the scope of the areas to be planted.

For the moment, consideration is being focused on the possible use of

a few of the proper rock garden shrubs to add refinement to lesser or even larger areas of soil which will improve in appearance or, perhaps, become more erosion-resistant if clothed with woody growth.

Strictly on the gardenesque side are plantings made with such subshrubs as *Alyssum argenteum* or the dwarf *A. saxatile compactum*, usually considered as herbaceous plants by the trade. Full sun and good drainage make these yellow-flowered plants show off in spring and have a pleasant gray-foliaged aspect if those blooms are sheared away upon fading. In the same class fall the shrubby evergreen candytufts, particularly the dwarf form of *Iberis sempervirens*. As with satisfactory forms of *Alyssum saxatile*, the dwarf candytufts, such as *Little Gem*, should be propagated from cuttings.

Somewhat more wild in its behavior, or at least harder to handle, is the native bearberry, *Arctostaphylos uva-ursi*, which luxuriates on stable, sandy slopes near the sea and in association with rock outcroppings on high ground inland. Many a gardener has looked at acre-large wild patches of bearberry in such natural locations as Cape Cod and longed to make bank plantings of comparable interest and beauty. Here is something which takes the sun and thrives where drainage is quick, as the commonly used *Vinca minor* will not. In one way, the two plants can be considered as opposites as far as these two cultural particulars are concerned. Also, as many a planter has discovered, there is a vast difference in ease of transplanting between the two plants.

After a try or two at digging wild bearberry plants, only to see most of them die when reset, your planter usually becomes more subtle in his approach and turns to planting stock grown from cuttings and handled out of pots. In this manner, it is possible to obtain good stands and, at that, in soil which, while well drained, is far from being pure sand. Also, in inland gardens there is often a weed problem not bothersome to wild stands near the sea.

Probably much more amenable to the vagaries of semicultivation than the bearberry is *Pachistima canbyi*. This trailing, branched, foot-high, American shrub can form a ground cover with less difficulty on well drained soil. Also, it is more shade-

resistant than bearberry. Like those of some other broad-leaved evergreens, its small leaves turn bronze to purple in winter. Here, too, planting from pots seems the more desirable practice.

For another native broad-leaved evergreen which can reach out to cover large areas, if given time enough, there is the box huckleberry, *Gaylussacia brachycera*. As for cultural requirements, this is a plant of reasonably moist, sandy or peaty soil. It is low in habit, with a boxlike aspect, as its common name implies, as well as being more easily suited as to root run than bearberry or *Canby pachistima*, the box huckleberry is more easily transplanted, either as cutting plants or as divisions chopped from old stands.

Although seldom used in ground cover plantings of any size, the cowberry, *Vaccinium vitis-idaea*, is quite capable of such use and with not too narrow requirements as to soil as long as it is on the acid side. Typical plants grow to be not more than a foot tall. They bear rounded, shining leaves, with white blooms in spring, followed by dark red berries, which have had some economic importance among some people under the name of mountain cranberry. For ground-covering purposes, it is listed as spreading, and so it is by stooling rather than trailing or running. In the trade, the cowberry is offered in two sizes, *Vaccinium vitis-idaea majus* having larger leaves and fruits than *V. v.i. minus*. It is the latter which is most often cultivated and most often known as mountain cranberry.

As for the true cranberry, it is sometimes planted in moist, sunny, peaty places for ground cover, but for the most part is an economic plant, which is the basis of one of the best managed and most profitable agricultural enterprises. Millions of cranberry plants have been sold entirely outside the nursery trade.

The low-bush blueberry is a deciduous plant often used for large-scale bank covering in sour soil areas. It, too, has never become a regular nursery item, but is collected in sods or divots for special jobs. It is a low-growing, spreading plant with a considerable degree of shade tolerance, all of which makes it useful for covering dry, barren, sour soils in association with oaks. Out in the open,

[Continued on page 54.]



CHARLIE CHESTNUT

COME AND DIG YOUR OWN



One of the members was asking me at the convention what is cooking with me and Emil, and if I didn't have nothing to report on the present situation here in Riverbend. The answer is no. That is unless the members should be interested in a certain chain of events, which caused a little stir of excitement at the nursery last fall.

It all started off when Emil got the bright idea to let customers come out and dig their own stuff. For the last twenty years that piece down by the railroad track has been getting out of hand. Ever year the stuff gets bigger and bigger until we gave it up and let it run to briars, rabbits and sawlogs. There is some of the best 9-inch box elder in the country in that patch and a lot of other things in the same category.

Any nurseryman in their right mind would have got in there with a logging outfit and cleaned it out, but not Emil. He always clings to the forlorn hope that someday there will be a big scramble for big evergreens, bare up for six feet from the bottom, and big shade trees that would take a locomotive hoist to lift.

It all started with Doc Hart, who is the president of the Civic Club this year. He met me and Emil down at Steamboat Fultons Bar and Recreation Parlor one day last August, and as the conversation often gets off to unpredictable subjects among the customers there, Doc braced Emil to see if he would donate a big tree to set in the little park by the depot.

"Donate!" says Emil, "That's all you guys ever think of. I dont see you donating any free spavin cure Doc, when you come out to my place. Them trees by the railroad is worth a fortune. I wouldnt take \$100 apiece for the lot. And it aint just the tree, theres all the work of taking it out and moving it."

After Emil let that sink in, he went on, "If you will get some of the members of the Civic Club to do the digging and moving, I will donate the tree, free for nothing, but I got to have my sign on it saying it was donated by the Riverbend Nursery."

If it hadnt been for Steamboat horning into the conversation just then, probably that would have been the end of the whole idea. But Steam-

boat is always a great one for figuring out deals.

"Emil," he says, "how far from the railroad track is them trees sittin', how many feet, that is?"

"Nearest ones is twenty-five or thirty feet or so," Emil says, "What difference does that make?"

"Heres a idea to work on, Doc," says Steamboat. "So long as the tree is going to set in the depot park, why cant we get the railroad to run a switch engine out there, and we can borrow that flat car with the long boom from Morse at the Windmill factory. Then we can go to work and move that tree just like nothin' and drop it off by the depot."

Then Doc spoke up. "Steamboat," he says, "that is the first idea you had in years that had any sense to it. Dont see why it wouldnt work. I'll get Frank down at the depot to write into the railroad, and I'll see Morse if he will let us take his boom. By George, Steamboat, just for that smart idea of yours, set 'em up on me."

"What about digging it out?" Emil says. "Me and Charlie is too busy when fall comes."

"Dont worry, Emil," Doc says, "we'll have a diggin' bee, invite all the members to come out and bring their shovels," Doc says.

Next morning Emil was all pepped up when he come into the office. "I got a great idea, Chas.," he says. "We'll advertise to have anybody come out and dig their own trees out of that patch by the railroad. Lots of people are looking for big stuff cheap and we can clear that land off and get in a good setting of honey-suckle next spring. I'll get up a ad and run it in the Lake Park Gazette."

When Emil gets a idea in his mind there is not any use to argue with him as he has a one track mind and the rails are rusty at that. So I just started picking around the edges of the idea a little at first. "Emil," I says, "if them trees are too big for us to move, how in the world do you expect anybody that never dug a tree in their life to come out with a wheelbarrow or an old sedan and carry one home even if they get it out of the ground."

"We'll let each one figure it out for themselves," says Emil. "Some-

times the nurserymen dont know all the answers either. Maybe some of the customers will have ideas how to dig them trees you never even thought of."

Emil continued, "I figure I can get \$10 each for the trees and about \$15 for the evergreens. Shrubs, I'll put out for \$2. Let 'em take their pick."

"They'll need more than a pick," I says. "They'll need some dynamite for some of them poplars and soft maples."

"Im goin' down and figure out how much I'll clear on that patch. Remember Chas. how you was after me for cutting all that fine stuff, and now comes a wonderful chance to clean up. While Im over there figurin', you go down to Morses and start diggin' them peonies. I told her they was no good, but I figure I can divide em up and get a couple hundred good divisions. We can sell em for choice mixed."

"Them are mixed all right," I says, "You sold her back the same ones three times already," I says.

But Emil didnt hear me. He had already taken a pad and pencil and I could see him walking down to the jungle by the railroad.

I didnt see him again until quitting time that night. He was sitting in the office, whistling thru his mustache, and he was in a good mood.

"D didnt have no idea what a fine lot of stuff was in that patch. Theres even some Pink Chestnuts in there," he says.

"That was part of a lot of stuff you bought from old John Bush-bottom in '29. You never paid him, you claimed they was only Buckeyes, remember that?" I says.

"Altogether there is about \$1,500 worth of stuff in there," he says, paying no attention to me. "Get out that price list from John, and see what John is asking for shade tree whips. Thats what I'll do, I'll set out a lot of whips in that piece when its all cleaned off good."

He didnt expect any cooperation from me, so I just let it pass.

"Here's the ad Chas.," he says, handing me a piece of paper all crossed out and written over. "What do you think of it?"

"Cant make nothin' out of it," I says. "This is bowling night," I

says. "I'll see you in the morning." And so I called it a day.

When it came along the last of October, Doc came out one day.

"Everything is all set," he says. "Frank got a order from the railroad to furnish a switch engine and Morse says we can use his boom, but we got to have the cable fixed on it."

"I'm giving a Linden for the Park, Doc," Emil says. "Them are the nearest to the track. They'll run about ten inch, and it'll take a lot of diggin'."

"Got all that fixed up too, Emil," Doc says. "I got twenty volunteers from the Club and Steamboat is going to furnish two cases of beer for the workers when they get dry."

"Well, I'll let you know when to get ready, Doc. Couple weeks yet. Say, while you're here Doc, just look at Victoria's stifle joint, and don't charge me for a call, as you're here anyway." So they went off to the barn, arm in arm.

That week end the customers started in to come after their bargains. Emil decided to get the money first, take them down to the patch and turn them loose with instructions on how to do it. First customer was Mrs. Gazzola from town here. Her old man is section boss on the railroad. She brought two other ladies with her and Emil took them down to the patch.

"All you got to do, ladies, is just dig a trench around and then tunnel under, so as to get it loose all around," Emil was telling them.

I went down there along late in the afternoon and didn't see a sign of anybody until I got right over in the patch. They was digging a blue spruce, and they had a tunnel like a woodchucks hole running right under the tree. They had come up right under a box elder over on the next row.

They looked like coal miners, covered with dirt and their clothes half torn off. One shovel was broken, and Mrs. Gazzola had a scratch on her chin, and she looked like she had been in a free-for-all fight. They were as far from having the tree dug as when they started. So when I pointed out their mistakes, Mrs. Gazzola raised herself up to her full four feet nine inches, threw down her shovel, and says, "Nuts, we quit."

They crawled through the fence, and the last I saw of them they were limping along the railroad track toward town.

The next morning two barbers from Lake Park came in with a little one wheel trailer on the back of their

coupe. One had on tennis shoes and carried a moulders shovel, and the other had a weak back and wore his white barbers pants. They didn't last as long as Mrs. Gazzola. We got their money first, which I can tell the members is the only way to do business on a deal of this kind. They had worked only about twenty minutes when I saw them coming up from the patch with their tree on the trailer.

"We decided to cut it off and save it for a Christmas tree," they said. Of all who came I think these two were the smartest of all.

During that week we had ten other customers, all of them about



Harold J. Parnham.

as hopeless tree diggers as my wife's grandmother, who will be 92 next April. In all we collected about \$100 or so on the deal. That is up to the time we give the word to Doc Hart to get his gang organized.

If the members will remember last fall, it was the driest time on record, so that any ordinary spade would just bounce off the ground like it was concrete. Everything was burning up. When the gang came out there was only eight members turned out. That was seven more than I expected. Me and Emil went out to supervise, but Emil let it be known he wasn't going to do any actual work on account of he was giving the tree free for nothing.

The boys started in about 10:30 in the morning, and by 4 o'clock they had a ball of dirt about eight feet in diameter. We had about an hour before the milk train was due to get loaded and get off the track.

We got the engine alongside and the boom stretched over, but it was still about four feet short of being over the tree. If any of the members has had experience in moving a eight

foot ball, with a mixture of grocery clerks and horse doctors doing the work, they can know that anything is liable to happen.

The engine was an old-timer from the roundhouse at Lake Park, and it was puffing and snorting and throwing sparks all over the place. The boom was one that Morse bought second or third hand over forty years ago to move angle iron around in the yard at the Windmill factory.

All went well at first until we had the tree about six feet off the ground. I noticed the cable starting to fray out, and I was just able to get the boys out from under in time. Down she come. That ball busted in four pieces. There wasn't over a bushel of dirt left on the tree. It wouldn't have lived anyway as it didn't have no more roots than a one-year apple.

[Concluded on page 58.]

HAROLD J. PARNHAM.

Now serving as president of the Iowa Nurserymen's Association, Harold J. Parnham began his landscape practice at the Wragg Nursery, Des Moines, immediately after World War I. Five years later he was employed in the landscape department of the Capital City Nurseries, where he remained for five years.

In 1929 Mr. Parnham went into business for himself, and in 1936 with Francis A. Robinson, he formed a partnership, which operates under the name Robinson & Parnham, landscape architects, site planners and landscape contractors. The firm handled the site planning for many war projects throughout the middle west during World War II, and today work is extended into many states and includes college campuses, parks and housing projects.

Prior to his election to the presidency, Mr. Parnham was vice-president of the Iowa Nurserymen's Association, of which he was secretary for many years. His firm is a member of the American Association of Nurserymen.

Mr. Parnham was a member of the committee which formed the Men's Garden Club of America and was a member of the board of directors for two years. He also served as secretary and president of the Des Moines Men's Garden Club and the Cosmopolitan Club and is a past president of the junior chamber of commerce. He is also a member of the Lions' Club, the chamber of commerce, the Better Business Bureau and the Tax Payers' League and belongs to the Methodist church.

Mr. Parnham is married and has two daughters and two grandchildren.

CHOICE LINERS FOR SPRING, 1949

	Each per 100	Each per 1000		Each per 100	Each per 1000
Abies balsamea , 4-yr. T.....	\$0.15	\$0.12	Taxus cuspidata capitata (cuttings),		
TT, 10 to 12 ins.....	.25	.20	T, 4 to 6 ins.....	\$0.30	\$0.25
Acer palmatum , 1-yr. S.....	.10	.09	6-yr. T, 10 to 12 ins.....	.90	.85
Azalea amoena , T, 4 to 6 ins.....	.18	.15	Taxus cuspidata capitata (from seeds),		
Azalea hinodogiri , T, 4 to 6 ins.....	.18	.15	6-yr. T, 10 to 12 ins.....	.75	.65
Berberis thun. atropurpurea , 2-yr. S,			6-yr. TT, 12 to 15 ins.....	1.50	1.25
12 to 18 ins.....	.06	.05½	6-yr. TT, 15 to 18 ins.....	1.50	1.50
2-yr. S, 18 to 24 ins.....	.08	.07½	Taxus cuspidata columnaris , 3-yr. T,		
Blueberries , Hybrid, R.C., 12 to 18 ins....	.20	.15	6 to 8 ins.....	.30	..
Varieties: Cabot, Rubel, Hancock,			Taxus cuspidata nana , 2-yr. T,		
Chamaecyparis argentea ,			8 to 12 ins.....	.30	.25
TT, 10 to 12 ins.....	.35	.30	4-yr. TT, 6 to 10 ins.....	.45	.40
Chamaecyparis filifera , T, 8 to 12 ins....	.25	..	6-yr. TT, 6 to 12 ins.....	.50	.45
Chamaecyparis pisifera aurea ,			Taxus cuspidata sieboldi , 3-yr. T,		
T, 8 to 12 ins.....	.35	.30	6 to 10 ins.....	.35	..
Chamaecyparis plumosa , T, 8 to 12 ins....	.25	.20	Taxus cuspidata thayeri , TT, 9 to 12 ins....	.50	..
TT, 10 to 12 ins.....	.30	.25	Taxus hicksi , 2-yr. T, 9 to 12 ins.....	.25	.20
TT, 12 to 15 ins.....	.35	.30	3-yr. T, 10 to 12 ins.....	.30	.25
Chamaecyparis plumosa aurea , TT,			TT, 8 to 10 ins.....	.35	.30
12 to 15 ins.....	.35	.30	TT, 10 to 12 ins.....	.45	.40
Chamaecyparis plum. Gold Dust ,			TT, 12 to 15 ins.....	.60	..
TT, 12 to 15 ins.....	.35	.30	Taxus intermedia (spreading),		
Cornus florida , 1-yr. S.....	.06	.05	2-yr. T, 6 to 10 ins.....	.30	.25
Cornus florida rubra , pot grafts.....	.45	.40	3-yr. T, 8 to 10 ins.....	.35	.30
Daphne cneorum (rooted cuttings).....	.10	.09	6-yr. T, 8 to 10 ins.....	.50	.45
Euonymus radicans carrieri ,			Taxus intermedia columnaris , 3-yr. T,		
T, 10 to 14 ins.....	.35	.30	8 to 12 ins.....	.35	.30
T, 9 to 12 ins.....	.30	.25	TT, 10 to 12 ins.....	.45	.40
Euonymus rad. coloratus , T, 8 to 10 ins....	.18	.15	TT, 12 to 15 ins.....	.60	.50
TT, 8 to 10 ins.....	.25	.20	Taxus intermedia hunnelliana ,		
Foraythia Spring Glory , 2½-in. pots....	.15	.15	4-yr. TT, 10 to 12 ins.....	.65	.60
Ilex crenata , 1-yr. T, 6 to 8 ins.....	.15	..	Taxus media (upright), 2-yr. T,		
Ilex crenata convexa , T, 6 to 8 ins.....	.20	.18	8 to 12 ins.....	.30	.25
Juniperus depressa plumosa ,			5-yr. TT, 12 to 15 ins.....	.50	..
T, 8 to 10 ins.....	.35	.30	6-yr. TT, 15 to 18 ins.....	.80	..
2½-in. pots.....	.17½	..	6-yr. TTT, 12 to 15 ins.....	.80	..
Juniperus hibernica , T, 8 to 10 ins.....	.25	.20	6-yr. TTT, 15 to 18 ins.....	1.25	..
Juniperus japonica , T, 8 to 12 ins.....	.35	..	Taxus media andersoni , TT, 6 to 10 ins....	.45	.40
Juniperus pfitzeriana , T, 6 to 8 ins.....	.30	.25			
2½-in. pots.....	.25	.20	The new media of which all nurserymen are thinking well. A beautiful grower, beautiful foliage.		
Juniperus sabinia , T, 6 to 8 ins.....	.30	..	Each Each		
Juniperus suecica , T, 8 to 10 ins.....	.25	.20	Taxus media, Halloran strain per 100 per 1000		
Juniperus virginiana , all varieties,			2-yr. T, 6 to 8 ins..... \$0.25 \$0.25		
pot grafts.....	.45	.40	3-yr. T, 8 to 12 ins..... .35 .30		
Magnolia soulangeana , pot grafts.....	.60	..	TT, 15 to 18 ins..... 1.50 ..		
Mahonia repens , T, 6 to 8 ins.....	.30	.25			
Philadelphus coronarius aureus ,			Taxus media hatfieldi , 2-yr. T, 9 to 12 ins....	.30	.25
2½-in. pots.....	.15	.15	3-yr. T, 10 to 12 ins.....	.35	.30
Picea canadensis alba , 2-yr. S, 4 to 6 ins....	.06	.05	4-yr. T, 10 to 12 ins.....	.40	.35
Picea engelmanni , 2-yr. S.....	.06	.05	6-yr. TTT, 12 to 18 ins.....	.90	.85
Picea excelsa , 1-yr. S.....	.03	.02½	Taxus media hibernica , (The hardy strain		
2-yr. S, 4 to 6 ins.....	.06	.05	of hibernica.)		
Picea pungens , T, 10 to 20 ins.....	.18	.15	TT, 9 to 12 ins.....	.40	..
2-yr. S.....	.06	.05	TT, 12 to 15 ins.....	.50	..
3-yr. S.....	.07	.06	TT, 15 to 18 ins.....	.75	..
4-yr. S.....	.09	.07	TTT, 12 to 15 ins.....	1.00	..
3-yr. T.....	.12	.10	TTT, 15 to 18 ins.....	1.25	..
4-yr. T.....	.15	.12	Taxus media , Moon's columnaris,		
Pieris japonica , 1-yr. T, 4 to 6 ins.....	.15	.14	T, 8 to 10 ins.....	.30	.25
2-yr. T, 6 to 8 ins.....	.25	.24	Taxus media pyramidalis , TT, 6 to 10 ins....	.45	.40
3-yr. T, 8 to 12 ins.....	.40	.35	Thuja occ. columbica , T, 6 to 8 ins.....	.30	.25
Pinus densiflora , 2-yr. S.....	.04	.03½	TT, 8 to 12 ins.....	.35	.30
3-yr. S.....	.05	.04	Thuja occ. compacta , T, 6 to 8 ins.....	.30	.25
3-yr. T.....	.10	.09	TT, 8 to 12 ins.....	.40	.35
Pinus montana mughus , 1-yr. S.....	.03	.02½	Thuja occ. douglasii spiralis ,		
2-yr. S, 2 to 4 ins.....	.06	.05	T, 10 to 12 ins.....	.30	.25
3-yr. T.....	.10	.09	Thuja occ. elegantissima , T, 8 to 10 ins....	.30	.25
Pinus nigra austriaca , 1-yr. S.....	.06	.05	TT, 8 to 10 ins.....	.35	.30
2-yr. S.....	.07	.06	2½-in. pots.....	.20	..
Pinus rigida , 2-yr. S.....	.04	.02½	Thuja occ. hoveyi , TT, 12 to 15 ins.....	.40	..
Pinus strobus , 2-yr. S.....	.04	.03	2½-in. pots.....	.18	..
3-yr. S.....	.05	.04	Thuja occ. nigra , 2-yr. T, 8 to 12 ins....	.30	.25
4-yr. T.....	.10	.09	5-yr. TT, 12 to 15 ins.....	.50	.45
Pinus sylvestris , 2-yr. S, 6 to 8 ins.....	.06	.05	Thuja occ. pyramidalis , 2-yr. T,		
2-yr. T, 6 to 8 ins.....	.09	.08	8 to 12 ins.....	.30	.25
3-yr. T, 8 to 10 ins.....	.10	.09	grafts, TT, 18 to 24 ins.....	.75	.60
Pinus thunbergi , 2-yr. S, 4 to 6 ins.....	.05	.04	2½-in. pots.....	.20	.18
2-yr. T, 4 to 6 ins.....	.10	.09	pot grafts.....	.35	..
Pseudotsuga douglasii , 1-yr. S.....	.03	.02½	Thuja occ. wareana , T, 6 to 8 ins.....	.22	.20
2-yr. S, 6 to 8 ins.....	.06	.05	TT, 8 to 10 ins.....	.35	..
2-yr. T, 8 to 8 ins.....	.10	.09	2½-in. pots.....	.20	.17½
Rhododendrons , named hybrids,			Thuja occ. woodwardi , T, 6 to 8 ins.....	.25	.20
50% red, pot grafts.....	.80	.75	Thuja orientalis (Biota), 1-yr. S.....	.63	.62½
Taxus baccata fastigiata , 3-yr. T,			Thuja orientalis aurea nana , pot grafts....	.35	..
6 to 12 ins.....	.30	.25	2-yr. T, grafts, 12 to 15 ins.....	.60	.50
Taxus baccata repandens , T, 6 to 8 ins....	.25	..	Tsuga canadensis , 3-yr. T, 6 to 12 ins....	.20	.17½
Taxus canadensis stricta , T, 6 to 10 ins....	.35	.30	Tsuga canadensis (coll. sdgs.),		
Taxus cuspidata , 2-yr. T, 8 to 12 ins.....	.25	.20	6 to 10 ins.....	.07½	.05
3-yr. T.....	.30	.25	Viburnum burkwoodi , pot grafts.....	.40	..
TT, 8 to 12 ins.....	.40	.35	Potted cuttings.....	.30	.25
Taxus cuspidata (No. 1, low, flat type),			Viburnum carlesii , pot grafts.....	.40	..
T, 10 to 14 ins.....	.35	.30	Weigela Bristol Ruby , 2½-in. pots.....	.15	.12½
TT, 12 to 15 ins.....	.60	..	Wistaria sinensis (grafting-size),		
TT, 9 to 12 ins.....	.50	..	1-yr. S.....	.64	.63
(No. 2, semiupright), T, 6 to 12 ins.....	.30	..	See our other advertisements on pages 18 and 24 in		
(No. 2, semiupright), TT, 12 to 15 ins....	.60	..	this issue.		
Taxus cuspidata brownii ,					
TT, 10 to 12 ins.....	.45	.40			
TT, 12 to 15 ins.....	.60	..			

All the above-listed material is grown by our best growers of lining-out material. All F.O.B. shipping points, packing additional at cost. Usual terms to trade accounts. All this material is listed subject to prior sale and subject to usual trade terms as mentioned in our trade lists.

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Wallingford, Conn.

Plant Notes Here and There

By C. W. Wood

During the year's visits to nurseries and gardens I have made notes on a few plants of recent introduction which I hope may be of interest to readers of the American Nurseryman.

I have long known and admired the fringed wormwood, *Artemisia frigida*, though I never was able to keep a plant growing for many years. That was of little consequence, however, for the plant is easily grown from cuttings of green wood. But it would be a deciding factor in the plant's reception by the general public. I was glad to find a home gardener who had several 10-year-old specimens which had been kept growing by shearing off the blooms before they opened. That makes a more presentable plant, anyway. The plant then makes a perfect dome of silver, hence the name of *Artemisia Silver Dome*, under which I saw it later. Under shearing it grows about six inches tall, and its perfect dome of silver makes an exciting ornament for a high, well drained spot in the rock garden.

Astilbe Fanol has always appealed to me as being the brightest astilbe to date, and in some associations its blazing-red color is a little too glaring. I saw it this summer associated with Shasta daisies, and it made a lovely picture. In case you have not made A. Fanol's acquaintance, its 2-foot-tall stems are clothed in pretty bronzed leaves, and the long feathery plumes are a bright shining red. It is altogether a lovely plant and a good landscape ornament.

For something out of the ordinary in bellflowers, one would have to look far to find one better qualified for the distinction than a form of *Campanula poscharskyana* seen under label of Elizabeth Hollister Frost. It is unfortunate that so lovely a plant has to be handicapped by such a long name, for it will surely become popular when its big stars, silvery at first and pure white in their later stages, are better known. Essentially the same as the parent, even to the long trailing stems from which arise the starry flowers, it is said to be of equal ease of culture in any sunny or partly shaded spot.

The recital of an experiment here with the type plant may suggest something of value to nurserymen who do planting. Two lots of plants from the same seedling bed were taken for

trial. One was planted in quite sterile sand and the other was given a rich loam. Both were in full sun and received the same amount of irrigation. The first lot never had stems over a foot long, and the flowers, though appearing over the usual period through June and July, were on the small side; the other had stems close to two feet long, the leaves were twice as large and the flowers were much larger. In truth, the two lots were quite unrecognizable as the same thing.

Speaking of campanulas brings to mind a long drift of what was labeled C. Blue Carpet. In August it was truly just that, a blue carpet. It is apparently a selection of what is generally known as C. carpatica nana, growing about five inches tall and flowering over most of the summer. That would make a highly satisfactory plant for general sales, for one could sell it knowing that it would give good results, even in the hands of a novice. And I doubt not that it would be a good seller in the neighborhood nursery.

I hesitate before saying anything about a new strain of long-spurred columbines, with flowers to four

inches or more across, that I saw last summer, because I am not sure that they are ready for the market. Perhaps we can compromise by mentioning them now and promising to give a source of supply as soon as any are released. In addition to spectacular size, I was also impressed by the plants' pleasing colors.

I am still undecided as to the final verdict on the hardy carnations that have been introduced during the past few years. If I had an ax to grind I could become enthusiastic about them without much urging. Viewing them objectively, I am not so sure, especially when we run into a summer of leaf spot. If I could keep them clean without too much spraying, they, in their fully double, fragrant flowers, would be among my favorite outdoor cut flowers. Of the English named varieties, Lucia, a dark salmon-shaded red, is the only one that has withstood our winters, here in northern Michigan, and has been able to escape the onslaughts of leaf spot. It should become popular if it behaves elsewhere as it did here.

The Unique series of hardy carnations in rose, salmon and purple have much to recommend themselves

JAPANESE YEW

A Real Bargain on Taxus — FOR THOSE WHO ACT FAST
200,000 TAXUS TRANSPLANTS — Top Quality

\$25.00
PER 100

All Varieties Listed:

{ *Taxus Brevifolia*, 4 to 6 ins. (dwarf Japanese)
{ *Taxus Cuspidata*, 6 to 8 ins. (low, flat)
{ *Taxus Hicksi*, 7 to 10 ins. (columnar)
{ *Taxus Hatfieldi*, 4 to 7 ins. (upright, conical)
{ *Taxus Densa*, 3 to 5 ins. (Japanese, very dwarf)

2-year bedded, excellent, well rooted stock. Spring, 1949, delivery. Lots of 500 or more ONLY at \$25.00 per 100. 25% deposit required to hold order, balance C.O.D., unless paid in full prior to shipment (no exceptions, please). PACKING FREE, F.O.B. Indiana, Pa.

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YEARLING PEACH TREES

	Each	Per 10	Per 100	Per 1000
7/8 to 1-in., 6 to 7 ft.	\$0.90	\$7.50	\$65.00	\$600.00
1 1/16 to 7/8-in., 5 to 6 ft.	.75	6.00	50.00	450.00
9/16 to 1 1/16-in., 4 to 5 ft.	.65	5.00	40.00	350.00
7/16 to 9/16-in., 3 to 4 ft.	.55	4.00	30.00	250.00
5/16 to 7/16-in., 2 to 3 ft.	.45	3.00	20.00	150.00
1/4 to 5/16-in., 2 to 3 ft.	.40	2.90	15.00	125.00
Belle of Georgia, Brackett, Carman, Early Crawford, Late Crawford, Early Elberta, Elberta, Gage Elberta, Goldencrest, Golden Jubilee, Greensboro, Halehaven, Heath Cling, J. H. Hale, O'Boy, Redhaven, Rochester, Shipper's Late, Sunhigh, Summercrest, Triogram, Valiant, Vedette, White Hale.				

APPLE TREES

2-year Buds	Each	Per 10	Per 100	Per 1000
1-in. and up, heavily br.	\$1.05	\$9.00	\$80.00	\$750.00
7/8 to 1-in., 6 to 7 ft.	.90	7.50	65.00	600.00
1 1/16 to 7/8-in., 5 to 6 ft.	.75	6.00	50.00	450.00
9/16 to 1 1/16-in., 4 to 5 ft.	.65	5.00	40.00	350.00
7/16 to 9/16-in., 3 to 4 ft.	.50	3.80	28.00	250.00
5/16 to 7/16-in., 2 to 3 ft.	.45	3.20	22.00	200.00
Anoka, Delicious, Dbl. Red Delicious, Red Gravenstein, Grimes Golden, Hyslop Crab, Jonathan, Dbl. Red Jonathan, Lodi, McIntosh, Dbl. Red McIntosh, Red Spy, Rome Beauty, R. I. Greening, Stayman, Dbl. Red Stayman, Williams Early Red, Yellow Delicious, Yellow Transparent, York Imperial.				

PEAR TREES

2-year Buds	Each	Per 10	Per 100	Per 1000
1 1/16-in. and up, 5 to 6 ft.	\$1.10	\$9.50	\$80.00	
9/16 to 1 1/16-in., 4 to 5 ft.	.95	8.00	65.00	
7/16 to 9/16-in., 3 to 4 ft.	.85	7.00	55.00	
Bartlett, Cayuga, Clapp Favorite, Duchess, Kieffer, Seckel.				

PLUM TREES

	Each	Per 10	Per 100	Per 1000
1 1/16-in. and up, 5 to 6 ft.	\$1.15	\$10.00	\$90.00	
9/16 to 1 1/16-in., 4 to 5 ft.	1.00	8.50	75.00	
7/16 to 9/16-in., 3 to 4 ft.	.85	7.00	60.00	
5/16 to 7/16-in., 2 to 3 ft.	.75	6.00	50.00	
Abundance, Burbank, Fellenberg, Stanley, Shropshire Damson, Red June.				

SOUR CHERRY

	Each	Per 10	Per 100	Per 1000
1 1/16-in. cal. and up	\$1.25	\$11.00	\$95.00	
9/16 to 1 1/16-in. cal.	1.15	10.00	85.00	
7/16 to 9/16-in. cal.	1.00	8.50	70.00	
5/16 to 7/16-in. cal.	.90	7.50	60.00	
Montmorency, May Duke, Early Richmond, English Morello.				

SWEET CHERRY

	Each	Per 10	Per 100	Per 1000
1 1/16-in. cal. and up	\$1.50	\$13.50	\$125.00	
9/16 to 1 1/16-in., 4 to 5 ft.	1.25	11.00	100.00	
7/16 to 9/16-in., 3 to 4 ft.	1.10	9.50	85.00	
5/16 to 7/16-in., 2 to 3 ft.	.95	8.00	70.00	
Black Tartarian, Governor Wood, Lambert, Napoleon, Schmidt's Bigarreau, Yellow Spanish.				

GRAPEVINES

Our Grapes have heavy fibrous root systems, with many lengthy canes at the top. Write for prices on large numbers.

CONCORD (blue), CATAWBA (mahogany),

NIAGARA (white):

	Each	Per 10	Per 100	Per 1000
2-yr., No. 1 grade	\$0.25	\$1.75	\$12.00	\$90.00
1-yr., No. 1 grade	.20	1.50	9.00	75.00
AGAWAM (red), BRIGHTON (red), FREDONIA (black), MOORE'S DIAMOND (white), WORDEN (black):				
2-yr., No. 1 grade	.25	2.00	15.00	110.00
1-yr., No. 1 grade	.20	1.75	12.00	100.00
CACO (red), DELAWARE (red), PORTLAND (white):				
2-yr., No. 1 grade	.30	2.25	18.00	140.00
1-yr., No. 1 grade	.25	2.00	14.00	120.00

ASPARAGUS ROOTS

Our Asparagus Roots have made a very good growth this season. We are the largest growers of Asparagus in the country. Write for special prices on large numbers.

Varieties: MARY WASHINGTON, PARADISE

	Per 25	Per 100	Per 250	Per 1000
3-yr., heavy No. 1 grade	\$1.00	\$3.50	\$7.50	\$25.00
2-yr., heavy No. 1 grade	.75	2.50	4.75	15.00
1-yr., heavy No. 1 grade	.60	2.00	3.50	9.00

RHUBARB ROOTS

Varieties: VICTORIA, MYATT'S LINNAEUS

	Per 25	Per 100	Per 250	Per 1000
2-in. up, forcing grade	\$2.75	\$9.50	\$22.50	\$85.00
1 1/2 to 2-in. cal.	2.00	6.50	15.00	55.00
1 to 1 1/2-in. cal.	1.50	4.50	10.00	35.00
3/8 to 1-in. cal.	1.25	3.50	7.50	25.00
1/2 to 3/8-in. cal.	1.00	2.50	5.00	16.00

BERRY PLANTS, No. 1 grade

	Per 10	Per 25	Per 100	Per 1000
Thorny Boysenberry	\$1.00	\$2.00	\$6.00	\$40.00
Thornless Boysenberry	1.00	2.00	7.00	50.00
Lucretia Dewberry	.60	1.25	4.00	30.00
Cumberland Raspberry	1.00	2.00	6.00	45.00
Indian Summer Raspberry	1.00	2.00	7.00	60.00
Latham Raspberry	1.00	2.00	6.00	50.00
St. Regis Raspberry	1.00	2.00	6.00	50.00
Sunrise Raspberry	1.00	2.00	7.00	60.00
Blowers Blackberry	1.00	2.00	6.00	40.00
Eldorado Blackberry	1.00	2.00	6.00	40.00

HEDGE PLANTS

Our soil and climatic conditions are ideal for the production of good Privet, and we guarantee our stock to be as well grown and developed in grade as any in this country. Write for special prices on large numbers.

CALIFORNIA PRIVET

(Ligustrum ovalifolium)

	Per 10	Per 100	Per 1000
6 to 12 ins., 2 canes or more	\$0.65	\$5.00	\$40.00
12 to 18 ins., 2 canes or more	.75	6.00	50.00
18 to 24 ins., 3 canes or more	.85	7.00	60.00
2 to 3 ft., 4 canes or more	1.00	8.50	75.00
3 to 4 ft., 6 canes or more	1.50	12.50	110.00

IBOLIM PRIVET (Ligustrum ibolium)

Can be furnished in exact grades and prices as California Privet listed above.

AMUR RIVER NORTH PRIVET

(Ligustrum amurense)

	Per 10	Per 100	Per 1000
12 to 18 ins., 3 canes or more	.80	6.50	55.00
18 to 24 ins., 3 canes or more	1.00	8.50	75.00
2 to 3 ft., 4 canes or more	1.40	12.00	105.00
3 to 4 ft., 5 canes or more	1.80	16.00	145.00

JAPANESE BARBERRY

(Berberis thunbergii)

	Per 10	Per 100	Per 1000
3-yr., 9 to 12 ins., trans.	1.60	12.00	110.00
3-yr., 12 to 15 ins., trans.	2.00	16.00	150.00
3-yr., 15 to 18 ins., trans.	2.50	20.00	190.00
3-yr., 18 to 24 ins., trans.	3.00	25.00	240.00

RED-LEAVED BARBERRY

(Berberis thunbergii atropurpurea)

	Per 10	Per 100	Per 1000
3-yr., 9 to 12 ins., trans.	2.50	20.00	175.00
3-yr., 12 to 15 ins., trans.	3.00	25.00	200.00
3-yr., 15 to 18 ins., trans.	3.50	30.00	260.00
3-yr., 18 to 24 ins., trans.	4.00	35.00	300.00

FREE PACKING FOR CASH WITH ORDER. Our Fall, 1948, Wholesale List offers a complete line of nursery stock. If you did not receive a copy, write us today. When requesting wholesale rates, kindly use your printed stationery. If interested in large lots, kindly submit your list of requirements for special consideration.

DECIDUOUS LINING-OUT STOCK

Hardwood Cuttings, Row Run

	Per 100
150 <i>Ampelopsis engelmanni</i>	\$ 5.00
300 <i>Ampelopsis quinquefolia</i>	5.00
1200 <i>Cornus alba sibirica</i>	5.00
100 <i>albida</i>	4.00
100 <i>baileyi</i>	4.00
500 <i>Deutzia Lemoine</i>	6.00
750 <i>Deutzia Pride of Rochester</i>	5.00
100 <i>Forsythia fortunei</i>	5.00
350 <i>primulina</i>	6.00
2500 <i>spectabilis</i>	5.00
1,200 <i>Hydrangea Hills of Snow</i>	15.00
2,000 <i>Hills of Snow</i> (rooted cuttings)	5.00
1,000 <i>paniculata</i>	8.00
350 <i>Lonicera bella albida</i>	5.00
1700 <i>grandiflora rosea</i>	5.00
100 <i>morrowi</i>	5.50
250 <i>tatarica alba</i>	5.50
1100 <i>tatarica rubra</i>	5.00
200 <i>xylosteum</i>	5.00
275 <i>Philadelphus Albatre</i>	6.00
200 <i>coronarius</i>	5.00
150 <i>Glacier</i>	6.00
125 <i>grandiflorus</i>	5.00

1-yr. Seedlings, Row Run

700 <i>Ampelopsis heterophylla</i>	4.50
2,000 <i>Ampelopsis tricuspidata</i>	4.00
500 <i>Aristolochia siphon</i>	10.00
2,000 <i>Aristolochia tomentosa</i>	2.50
23,000 <i>Berberis thunbergii</i> (extra-good)	1.25
5,000 <i>thunbergii atropurpurea</i>	3.00
5,000 <i>thunbergii atropurpurea</i> , 2-yr., 12 to 18 ins.	5.50
450 <i>Catalpa speciosa</i>	2.00
850 <i>Celastrus orbiculata</i>	5.00
10,000 <i>Cornus florida</i>	5.00
8,700 <i>Cydonia japonica</i>	3.00
150 <i>Desmodium penduliflorum</i>	4.00
500 <i>Euonymus bungeanus</i>	3.00
2,500 <i>europeus</i>	3.00
150 <i>yedoensis</i>	3.00
300 <i>Hamamelis virginiana</i>	3.00
1,800 <i>Hibiscus syriacus</i>	2.50
500 <i>Laburnum vulgare</i>	5.00
850 <i>Lindera benzoin</i>	4.00
900 <i>Prunus maritima</i>	3.00
1,700 <i>Rhodotypos kerrioides</i>	3.50
500 <i>Rosa rugosa alba</i>	7.50
200 <i>Sophora japonica pendula</i>	15.00
200 <i>Sorbus aucuparia</i>	8.00
1,200 <i>Syringa villosa</i>	2.00

See our other advertisements on pages 15
and 24 in this issue.

Write for catalog

E. D. ROBINSON SALES AGENCY
WALLINGFORD, CONN.

"A friendly, efficient service"

to gardeners. All three types have a long season of production—in fact, they have a tendency to bloom themselves to death—are delightfully fragrant and are quite hardy. All deserve a trial in neighborhood nurseries.

Personally, I am not especially fond of the fringed Shasta daisies, like Chiffon, but I can see a good future for Fringed Beauty, whose almost double, fluffy white flowers remind one of a double annual aster. There are some interesting things happening in Shasta daisies, and we may look forward to a number of good kinds during the next few years.

It is unfortunate for gardens that their owners are so often prejudiced against thistles. There is not a little good material concealed in the general name and not the least beautiful of these are the echinops, or globe thistles. That is true even of the species, such as *Echinops ritro*. But there is much good material when we reach the garden selection, including the English variety Taplow Blue. It is the bluest, a deep shining blue, and the globes are the largest of any echinops that I know. If you sell locally, I believe that you can sell E. Taplow Blue after your clients see it. But do not sell them seedlings as true Taplow Blue, as some do, because it does not come true from seeds. Rather they should be grown from root cuttings after the manner used on fleshy-rooted plants.

Although I have not seen the new *Lythrum Dropmore Purple*, I have a glowing report on it from a Canadian friend and note that it is now available in the United States. My informant, a careful observer of the horticultural scene, reports a pleasing purple color on a plant of usual *lythrum* proportions.

Thoughts on Small Toadflaxes.

In a recent letter asking for a report on the small *linarias*, the writer bemoaned the fact that so many of them were too tender for his climate. It is a fact, of course, that many of the toadflaxes are tender to cold, but one need not worry much on that score because most of them bloom the first year from seeds and can be treated as annuals. Then, too, there are a number of annual species which, being useful garden plants, can be sold from pots for bedding. No doubt, one could furnish a garden entirely with toadflaxes and still have a pleasing colorful planting throughout the open year. It is a fact, though, that many of them spread too rapidly from the root to be admitted to the vicinity of delicate plants, but we of the north, where *Linaria aequitri-*

[Continued on page 48.]

LILACS

Why stick to varieties that were good enough in their day but should have been discarded decades ago?

We offer nurserymen the most complete, up-to-date assortment in this country, including the very latest European and American originations.

For full particulars, complete descriptions, etc., see our price list 4849 if you have it, or write us today for a copy. It contains a wealth of uncommon material.

W. B. CLARKE & CO.

P.O. Box 343

SAN JOSE 2, CALIF.

ACER PLATANOIDES • NORWAY MAPLES

Look!	Look!
% to 1-in. cal.	Per 100
1 to 1½-in. cal.	\$ 75.00
1½ to 1¾-in. cal.	100.00
1¾ to 1½-in. cal.	200.00
1½ to 1¾-in. cal.	325.00
1¾ to 2-in. cal.	375.00
2 to 2½-in. cal.	500.00

Additional charge of 10% will be added for balling and shipping. No charge will be made for loading bulk trucks. When C.O.D. shipment is desired, a cash deposit of 25% must accompany order.

STATE ROAD NURSERY

State and Sproul Rds.
Route 1 MEDIA, PA.

LILACS

French Hybrids and Standards in 30 best cut flower varieties.

1-yr. grafts, \$25.00 per 100; \$200.00 per 1000.

Ask for Descriptive List.

Also list of *Taxus* and other liners for Spring, 1949, shipment now ready.

DEERFIELD NURSERIES

DEERFIELD STREET P. O. N. J.

PRIVET and BERBERIS

Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

MILFORD

DELAWARE



with CLOVERSET POTS

Big changes have taken place in the nursery business in the past few years. The trend to better merchandising methods reached a high peak this past season. More nurserymen than ever before used Cloverset Pots to "spark" their sales efforts.

In 1949 many additional nurserymen have definite plans to streamline their selling methods with Cloverset Pots and Cloverset Merchandising Methods. If you have not already done so—'49 is the year to streamline. Get the full story by writing for our FREE BOOK—and by ordering samples of Cloverset Pots.

You can't start too early. **DO IT NOW!**

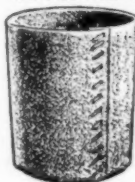
SEND ONLY 25c FOR SAMPLES
OF NO. 0, 1, 2, 3. **WE PAY THE POSTAGE.**
Correct Size for Every Purpose



No. 0
For perennials and greenhouse.



No. 1
For perennials and MUMS.



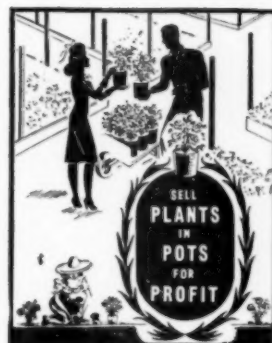
No. 2
For roses and shrubs.



No. 3
For large shrubs and transplanting.

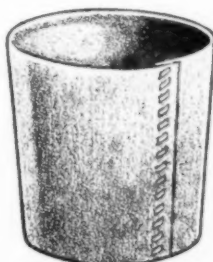
COMPARE THESE PRICES (STANDARD HEAVY)

Price List	No. 0	No. 1	No. 2	No. 3	No. 4
Height	5½ ins.	6½ ins.	9½ ins.	9 ins.	Height . . . 13 ins.
Diam. Top	5 ins.	6 ins.	7 ins.	8 ins.	Diam., top, 12 ins.
Bottom Diam.	4½ ins.	5½ ins.	6½ ins.	7½ ins.	Diam., bot., 11 ins.
Corresponding Clay Pot	6-in.	7-in.	8-in.	9-in.	Approx. Wt., per 100, 200 lbs.
Approx. Weight Per 100	35 lbs.	52 lbs.	78 lbs.	88 lbs.	25 pots. \$ 6.25
Per 100	\$3.00	\$4.25	\$4.75	\$5.25	50 pots. 12.50
Per 1000	\$27.50	\$40.00	\$45.00	\$50.00	75 pots. 18.75
					100 pots. 22.50
					1000 pots. 200.00



Write for the above
FREE BOOK

1. Builds **CASH-and-CARRY TRADE**
2. Extends **SELLING SEASON** SEVERAL MONTHS
3. Prevents **PLANT LOSSES**
4. Attracts **BEST CLASS CUSTOMERS**
5. Increases **PROFITS**
6. Increases **CUSTOMER SATISFACTION**



New No. 4 Pot

This larger pot is ideal for large shrubs, fruit trees and evergreens. Send **25c** for sample to be sent postpaid.

Color Movie Available

The Cloverset Color Movie of the spring potting, growing and selling season at Cloverset is now available for showing to Association groups. **NO CHARGE.** Write for details.

Attention!!!

East Coast Nurseries

Pool car shipments will save on freight. Early orders for l.c.l. shipments will be pooled when possible. To save on freight place your order now for future delivery.

Practical Nurserymen for 25 years.

CLOVERSET FLOWER FARM

ERNEST HAYSLEER & SON

105th Street and Broadway, Kansas City 5, Mo.

Coming Events

MEETING CALENDAR.

December 28 and 29, Nebraska Association of Nurserymen, Hotel Cornhusker, Lincoln.

January 2 to 4, 1949, A. A. N. Eastern Regional Meeting, Hotel Pennsylvania, New York, N. Y.

January 3, Long Island Nurserymen's Association, Hotel Pennsylvania, New York, N. Y.

January 3, Missouri State Nurserymen's Association, Hotel Muehlebach, Kansas City.

January 3, Kansas Association of Nurserymen, Hotel Muehlebach, Kansas City, Mo.

January 4 and 5, Western Association of Nurserymen, Hotel Muehlebach, Kansas City, Mo.

January 5, Connecticut Nurserymen's Association, Waverly Inn, Cheshire.

January 5 to 7, Northeastern Weed Control Conference, Hotel New Yorker, New York, N. Y.

January 5 to 7, Indiana Association of Nurserymen, Union Memorial building, Purdue University, Lafayette.

January 6, Iowa retail landscape nurserymen, Hotel Kirkwood, Des Moines.

January 7 and 8, Iowa Nurserymen's Association, Hotel Kirkwood, Des Moines.

January 7 to 9, American Association of Nurserymen, executive committee, Hotel La Salle, Chicago.

January 10, National Landscape Nurserymen's Association, Hotel La Salle, Chicago.

January 10, National Mail Order Nurserymen's Association, Hotel La Salle, Chicago.

January 10, All-America Rose Selections, Inc., Hotel La Salle, Chicago.

January 10 and 11, Maryland Nurserymen's Association, Lord Baltimore hotel, Baltimore.

January 11, National Association of Plant Patent Owners, Hotel La Salle, Chicago.

January 11 to 13, Illinois State Nurserymen's Association, Hotel La Salle, Chicago.

January 11, Massachusetts Nurserymen's Association, Hotel Kenmore, Boston.

January 12 to 14, short course for arborists and landscape gardeners, sponsored by Ohio State University, Neil House, Columbus, O.

January 14, Western New York Nurserymen's Association, Hotel Seneca, Rochester.

January 18 and 19, short course for nurserymen, Ohio State University and the Neil House, Columbus, O.

January 19 and 20, Oklahoma Nurserymen's Association, Biltmore hotel, Oklahoma City.

January 20 and 21, Ohio Nurserymen's Association, Neil House, Columbus.

January 20 to 22, Tennessee State Horticultural Society, Andrew Jackson hotel, Nashville.

January 24 and 25, Kentucky Nurserymen's Association, Sealback hotel, Louisville.

January 25 and 26, Pennsylvania Nurs-

erymen's Association, Bellevue-Stratford hotel, Philadelphia.

January 26 and 27, Tennessee State Nurserymen's Association, Hermitage hotel, Nashville.

January 27 and 28, Michigan Association of Nurserymen, Pantlind hotel, Grand Rapids.

January 28, New Jersey Association of Nurserymen, Trenton.

January 30 to February 1, Virginia Nurserymen's Association, John Marshall hotel, Richmond.

February 1 to 3, New England Nurserymen's Association, Hotel Statler, Boston, Mass.

February 3, Oregon Association of Nurserymen, Heathman hotel, Portland.

February 7 and 8, Rocky Mountain Horticultural Conference, Cosmopolitan hotel, Denver, Colo.

February 15 to 17, conference for nurserymen, Pennsylvania State College, State College.

February 17 and 18, Midwestern Shade Tree Conference, Hotel La Salle, Chicago.

March 3 and 4, Canadian Association of Nurserymen, Royal York hotel, Toronto, Ontario.

NEBRASKA PLANS.

The annual meeting of the Nebraska Association of Nurserymen will be held December 28 and 29

at the Hotel Cornhusker, Lincoln, according to an announcement by Cornelius Speidell, secretary. Robert Campbell and his committee are arranging an outstanding 2-day program with a gala banquet the evening of December 28.

Highlights of the banquet will include a talk on "Personnel Problems" by Grey Jewett, assistant superintendent, Western Electric Co., Lincoln, and songs by an outstanding barbershop quartet, the Key Masters.

A nurserymen's school will be held December 29 at the college of agriculture of the University of Nebraska. Featured on the day's program will be talks on "Landscape Design" by Prof. L. R. Quinlan, landscape department, Kansas State University, Manhattan, and on "Soil Management in the Nursery" by Joseph A. Abrahamson, Mount Arbor Nurseries, Shenandoah, Ia.

EASTERN NURSERYMEN'S CONVENTION PROGRAM.

Plans for the eastern regional nurserymen's convention, January 2 to 4 at the Hotel Pennsylvania, New York city, are well under way, and indications are for an even greater interest and heavier attendance than

WESTERN ASSOCIATION OF NURSERYMEN 1949 Convention

Kansas City, Mo.

Jan. 3-4-5, 1949

Hotel Muehlebach

HEAR: Milton Eisenhower, President, Kansas State College. Howard Taylor, President, A. A. N.—and other headline speakers.

SEE: Your friends from all over the country.

LEARN: The latest developments in the industry—who wants to buy your stock—and who has what you need.

ENJOY: The banquet and entertainment Tuesday evening.

Oldest Sectional Nurserymen's Association in America

No Registration Fee.

Make reservations at once. Hotel rooms are still scarce.

C. C. Smith, Sec'y.
Charles City, Iowa

last year. The convention will open at 3 p. m. Sunday, January 2, with a meeting of region I of the American Association of Nurserymen. Val-leau Curtis, Curtis Nurseries, Calli-coon, N. Y., chairman of region I and of the convention, will preside. Matters of regional importance will be discussed at that time. This will be followed by a cocktail party at 6 p. m., which promises to be a gala affair, with music and entertain-ment. Charles R. Mouquin, Eugene Henri Mouquin, Inc., Glen Head, N. Y., chairman of the entertainment committee, is in charge.

Official registration for the con-vention will begin at 8:30 a. m. Mon-day. The New York State Nursery-men's Association is holding its meet-ing, previously scheduled at Roches-ter, Monday morning at 9:30, while the meeting of the Long Island Nurs-erymen's Association will be held at 11 a. m.

The luncheons on Monday and Tuesday are planned as important features of the convention, with spe-cial stress on menus, music and speak-ers. Following the pattern set last year, which worked out so well, there will be no banquet or evening events so that guests will have time available to see New York city.

Guest speakers highlighting the program Monday afternoon will be James I. E. Ilgenfritz, Monroe, Mich., vice-president of the American Asso-ciation of Nurserymen, and Dr. Al-fred M. S. Pridham, associate pro-fessor, department of floriculture and ornamental horticulture, Ithaca, N. Y., and editor of New York Nurs-ery Notes. Dr. Pridham will give a talk about his recent trip to New Zealand where he spent his sabbatical leave in continuing his research on problems of crop production. Dr. Pridham will show the color slides which he took on his trip. Another feature of the program will be a forum on the subject "How's Busi-ness?" Monday afternoon, under the direction of Frank LaBar, past presi-dent of the A. A. N.

The program planned for Tuesday morning will feature a sympos-ium on "Industrial Planting," un-der the auspices of the National Landscape Nurserymen's Associa-tion, with Charles Boardman presid-ing. Francis Chilson, noted designer of industrial buildings, will present his viewpoint on the landscaping of such structures. Donald Wyman, Bay State Nurseries, Inc., North Abing-ton, Mass., will present the nurs-eryman's viewpoint on "Industrial Planting of Manufacturing Buildings and Grounds," and Eugene Muller,

ORNAMENTAL TREES



Catalpa Bungei. Note straight stems and well developed heads.

CATALPA BUNGEI (Umbrella Catalpa). Dense, round heads. Valuable for formal planting or for setting under overhead wires.

	Per 10	Per 100
4-foot stems	\$11.50	\$100.00

GLOBE LOCUST (Umbrella Locust). Tops grow naturally in globe shape. Desirable for formal and street planting.

6-foot stems	20.00	175.00
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LOMBARDY POPLAR. Young, vigorous, healthy stock.

Low-branched.		
6 to 8 feet	4.50	40.00
5 to 6 feet	2.90	25.00
4 to 5 feet	2.20	18.00

CHINESE ELM. 2-year, root-pruned trees.

5 to 6 feet, 9/16 to 11/16-inch caliper	4.00	35.00
4 to 5 feet, 7/16 to 9/16-inch caliper	2.60	22.00

ROSE ACACIA, standards, (*Robinia hispida*). Com-pact, globe-shaped top with large, showy clusters of bright pink flowers. Cut back two or three times during summer for recurrent bloom.

4 to 5-foot stems	17.50	150.00
3 to 4-foot stems	15.00	135.00

DOUBLE-FLOWERING PEACH (*Prunus*).

Burbank, double. Pink bud, opening white.

Camelliaeflora. Large, fully double, deep red flowers.

5 to 6 feet	8.50	75.00
4 to 5 feet	6.50	60.00
3 to 4 feet	5.50	50.00

WILLIS NURSERY COMPANY

"Your Wholesale Nurserymen"

OTTAWA, KANSAS

May we extend our

Heartiest Season's Greetings

and give thanks to all of you for your valued patronage of the past.

SPRING, 1949, OFFERINGS

	Per 1000
<i>Taxus Cuspidata</i> , 18 to 24 ins., B&B	\$2750.00
<i>Tsuga Canadensis</i> , 2 to 3 ft., B&B	2500.00
<i>Tsuga Canadensis</i> , 3 to 4 ft., B&B	3500.00

All fine material, certified for western shipment.

Phone, Write or Visit.

A. N. PIERSON, Inc.

CROMWELL, CONN.

PHONE: Middletown 224 or 225

E. D. Robinson, Sales Representative.

ROSES

WHOLESALE ONLY

2-year, field-grown

Four Generations Growing America's Finest Roses.

CARL SHAMBURGER NURSERY

TYLER, TEXAS

JAPANESE YEW

A Real Bargain on *Taxus*—FOR THOSE WHO ACT FAST

200,000 *TAXUS* TRANSPLANTS—Top Quality

\$25⁰⁰
PER 100

All Varieties Listed:

Taxus Brevifolia, 4 to 6 ins. (dwarf Japanese)
Taxus Cuspidata, 6 to 8 ins. (low, flat)
Taxus Hicksi, 7 to 10 ins. (columnar)
Taxus Hatfieldi, 4 to 7 ins. (upright, conical)
Taxus Densa, 3 to 5 ins. (Japanese, very dwarf)

2-year bedded, excellent, well rooted stock. Spring, 1949, delivery. Lots of 500 or more ONLY at \$25.00 per 100. 25 per cent deposit required to hold order, balance C.O.D., unless paid in full prior to shipment (no exceptions, please). PACKING FREE, F.O.B. Indiana, Pa.

MUSSER FORESTS, Inc., Indiana, Pa.

MAXWELL, BOWDEN & RICE,

Incorporated
Wholesale Nurseries
GENEVA, NEW YORK
Phone 2974

AMERICAN NURSERYMAN

De Kalb Nurseries, Norristown, Pa., will discuss "Industrial Plantings of Large Garden Apartment Developments and Industrial Homesite Developments."

Tuesday afternoon, Richard P. White, executive secretary of the A. A. N., will present the latest A. A. N. news from Washington, D. C., and around the country, and William J. Smart, Dundee, Ill., A. A. N. transportation chairman, will tell of the big A. A. N. convention to be held at San Francisco next July.

Room reservations for the eastern regional nurserymen's convention should be made as soon as possible by writing to Frank Morse, front office manager, Hotel Pennsylvania, New York 1, N. Y., and it is important to mention that the reservation is wanted for the eastern regional nurserymen's convention.

Arrangements for additional speakers and final plans for the convention were made at a meeting of the chairmen of the various convention committees December 8 at the Hotel Pennsylvania. Those attending were: Valteau Curtis, Charles M. Boardman, Peter Cascio, Charles Hess, Frank LaBar, Charles Mouquin, Howard C. Taylor, Peter J. van Melle, Erwin Whitham and Marie M. Enberg.

MISSOURI PROGRAM.

The annual meeting of the Missouri State Nurserymen's Association January 3 will follow a dinner at 6:30 p. m. at the Hotel Muehlebach, Kansas City. Principal speaker of the evening will be Prof. James E. Smith, Jr., department of floriculture, University of Missouri, and secretary-treasurer of the Missouri State Florists' Association, who will discuss closer cooperation between Missouri nurserymen, florists and allied tradesmen for the advancement of their industries in general and in particular to effect a more unified representation before the Missouri state legislature for the purpose of improving facilities for students in horticulture and floriculture at the University of Missouri. Landscape architectural courses are especially in need of expanded facilities, as present setup is far behind that of other states. Professor Smith will also explain the recent survey the Missouri State Florists' Association had made of its industry.

Another feature of the evening will be the showing by Kenneth Haysler, Cloverset Flower Farm, Kansas City, of a Technicolor movie

We wish to extend our sincere wishes for a

MERRY, MERRY CHRISTMAS

and a

HAPPY, PROSPEROUS NEW YEAR

to all our friends, and to thank them for all past favors, with an added wish that we may again have the pleasure of serving them in the future.



LEGHORN'S EVERGREEN NURSERIES

Geer St.

CROMWELL, CONN.

on selling nursery stock in Cloverset pots.

The remainder of the meeting will be devoted to the discussion of association business and election of new officers. A report will be given by a committee from the association composed of Edwin Stark, Joseph Houlihan, Joseph Myers, Hugh Steavenson and Edward Ambo, which met December 10 at St. Louis to discuss with Thomas R. Douglass, commissioner of the state department of agriculture, the propagation of multiflora roses in government nurseries. Edward Ambo, secretary, will present information from Albert F. Meehan, secretary of the Pennsylvania Nurserymen's Association, as to the steps taken by his association to have rates lowered on workmen's compensation insurance to \$1 per \$100 pay roll. Lien laws as they apply to the landscape nursery business, increases in appropriations for the office of state entomologist and applications for memberships will complete the agenda.

IOWA PLANS.

In addition to the meeting of the Iowa Nurserymen's Association, January 7 and 8 at the Hotel Kirkwood, Des Moines, the retail land-

JUMBO-SIZE FRUIT TREES

Cost less than Shade Trees and can be used for shade as well as fruit.

Apple, Peach, Plum and Pear, 6 to 7 ft., 3/4 to 1-in. caliper, \$9.00 per 10, \$85.00 per 100 in following varieties.

APPLE
Bonum
Cortland
Double Red Delicious
Double Red Jonathan
Grimes Golden
Lowry
M. B. Twig
Rome Beauty
Stayman
Winesap
Yellow Delicious
York Imperial

PEACH
Belle of Georgia
Elberta
Golden Jubilee
Halehaven
J. H. Hale
Redhaven
Shippers Red
Sullivan Early Elberta

PLUM
Burbank
Shropshire Damson
Wickson

PEAR
Kieffer

Also we offer Peach, 7 to 8 ft., 1 to 1 1/2-in. caliper, \$12.50 per 10, \$110.00 per 100.

Submit list for quotations on other varieties and sizes of Fruit Trees, Berries and Ornamentals.

WAYNESBORO NURSERIES

WAYNESBORO, VIRGINIA

TAXUS MEDIA HALLORAN

The past winter proved this variety to be very well adapted for the middle western climate. We have 1, 2 and 3-year liners to offer.

VERKADE'S NURSERIES

NEW LONDON, CONN.

WISTARIAS

There is much more variation in these than is generally supposed, including pink and double violet flowers, clusters up to 4 ft. long, etc. The Japanese forms are hardier than the common Chinese. We propagate and offer the largest collection in the country in both.

Climbing and Tree forms.

For full particulars, complete descriptions, etc., see our price list 4849 if you have it, or write us today for a copy. It contains a wealth of uncommon material.

W. B. CLARKE & CO.
P.O. Box 343
San Jose 2, Calif.

TWO-YEAR TRANSPLANTS

	Each	per 100
150 <i>Berberis thunbergii</i> , 18 to 24 ins.,.....	.15	\$0.20
900 16 to 18 ins.,.....	.15	
1500 12 to 15 ins.,.....	.10	
100 <i>Celastrus orbiculata</i> , 2 to 3 ft.,.....	.35	
100 <i>Cydonia japonica</i> , 2 to 3 ft.,.....	.35	
350 <i>Kolkwitzia amabilis</i> , 18 to 24 ins.,.....	.40	
275 12 to 18 ins.,.....	.30	

See our advertisements of lining-out stock on pages 16 and 18 in this issue.

E. D. ROBINSON SALES AGENCY
Wallingford, Conn.
"A friendly, efficient service."

QUALITY LINERS

	Per 100
<i>Taxus Capitata</i> 6 to 8 ins., trans.,.....	\$25.00
Red Japanese Maple 8 to 15 ins., grafts,.....	75.00
Red-flowering Dogwood 10 to 15 ins., grafts,.....	65.00

Send for complete new list.

POSSUM HOLLOW NURSERIES
6327 Magnolia St.
PHILADELPHIA 44, PA.

Trees, Evergreens, Shrubs Fruit Trees

Write for Our Wholesale Trade List
W. - T. Smith Corporation
Telephone 2689 GENEVA, N. Y.

scape nurserymen of the state will hold a closed meeting at the Hotel Kirkwood, January 6 at 1:30 p. m. This meeting was planned last year after a group of the Iowa retail landscape nurserymen met and found the meeting so beneficial that it was decided to hold a repeat meeting in 1949. It is hoped that this meeting will be made an annual event.

Since the Iowa state legislature will be in session in 1949, those planning to attend the Iowa nurserymen's meetings are urged to make reservations as early as possible to assure hotel accommodations.

The program of the Iowa Nurserymen's Association will be confined to two half-day sessions, one on Friday afternoon and the other on Saturday morning. Both the president and the executive secretary of the American Association of Nurserymen, Howard C. Taylor, East View, N. Y., and Richard P. White, Washington, D. C., will speak. There will also be present a representative from the office of the collector of internal revenue to give the latest information on income tax laws, especially with regard to the recently enacted community property laws and their effect.

Friday morning members of the American Association of Nurserymen will hold a meeting with President Taylor and Secretary White. The banquet and entertainment will be held Friday evening. And Friday noon there will be a special luncheon for the ladies, who will later tour one of the large industrial establishments in the vicinity.

BALTIMORE-BELTSVILLE MEET FOR MARYLAND MEN.

At a recent meeting of the executive committee it was decided to hold the winter meeting of the Maryland Nurserymen's Association, January 10 and 11. Headquarters will be the Lord Baltimore hotel, Baltimore. January 10 will be devoted to meetings at the hotel, while January 11 will be spent at the United States Department of Agriculture research center, at Beltsville, to observe research activities there.

Dr. Frank P. Cullinan, assistant chief of the bureau of plant industry, is arranging for the group to tour the experimental greenhouses at Beltsville. Specialists on berry plants, fruit stocks, ornamentals and greenhouse crops, etc., will be present to tell and show what is new in these fields. And the scientists from the United States Department of Agriculture will also be available to discuss problems with the nurserymen.

AMERICAN NURSERYMAN

LINING-OUT STOCK

	Per 100	Per 1000
<i>Acer palmatum</i> , 4 to 6 ins., sdlg.,.....	\$ 5.00	\$ 45.00
<i>Cornus florida</i> , 8 to 10 ins., sdlg.,.....	5.00	45.00
<i>Fagus sylvatica</i> , 8 to 10 ins., sdlg.,.....	12.00	100.00
<i>Magnolia glauca</i> , 6 to 8 ins., sdlg.,.....	5.00	45.00
<i>Picea excelsa</i> , 4 to 6 ins., sdlg.,.....	5.00	45.00
<i>Pinus mughus</i> , 3 to 5 ins., sdlg.,.....	5.00	45.00
<i>Pseudotsuga douglasii</i> , 4 to 6 ins., sdlg.,.....	5.00	45.00
<i>Syringa vulgaris</i> , 6 to 8 ins., sdlg.,.....	3.50	30.00
<i>Taxus cuspidata capitata</i> , 6 to 8 ins., tr.,.....	22.50	200.00
<i>Thuja orientalis</i> , 8 to 10 ins., tr.,.....	7.50	60.00
<i>Tsuga canadensis</i> , 4 to 8 ins., tr.,.....	12.00	100.00
<i>Tsuga canadensis</i> , 8 to 12 ins., tr.,.....	20.00	175.00

Complete list of lining-out stock on request.

HESS' NURSERIES
P.O. Box 52 MOUNTAIN VIEW, N. J.

EVERGREENS and SHRUBS

ROOTED CUTTINGS and TRANSPLANTS

Write for complete list.

ESHAM'S NURSERIES
Frankford, Del.

We Offer—

EVERGREENS—In a large assortment of **PYRAMIDAL** and **GLOBE ARBOREVITAE**, **PFITZER JUNIPER** and **YEW**s in grades at attractive prices. **SOME LARGE SPECIMEN EVERGREENS, SHRUBBERY** and **SHADE TREES**.

Mail want list for prices.

THE WESTMINSTER NURSERIES
Westminster, Md.

NORTHERN COLLECTED EVERGREENS FERNS

PLANTS
SHRUBS
WILLIAM CROSBY HORSFORD
Charlotte, Vermont

LINERS

BROUWER'S NURSERIES
(E. John Brouwer)

Box 25 624 Montauk Ave.
NEW LONDON, CONN.

While speakers have not yet been announced, topics which will come up for discussion will include salesmanship, the economic situation, pest control, propagation and landscape work, according to George S. Langford, educational secretary.

Since considerable interest has been expressed in obtaining displaced persons from Europe for nursery and greenhouse work, arrangements are being made to have discussed the requirements for obtaining and utilizing displaced persons.

N. L. N. A. PLANS WORKSHOP PROGRAM.

The program for the midwinter meeting of the National Landscape Nurserymen's Association, to be held January 10 in parlor F on the mezzanine floor of the Hotel La Salle, Chicago, has been planned as a workshop, so that members may derive as much information as possible through participation in all the discussions. Originating during the war years from round-table discussions at the association's executive committee meetings, this type of program has proved so popular with the landscape nurserymen that it is now being expanded into a program of selected subjects conducted by discussion leaders.

After the call to order and remarks by President George Siebenthaler, Monday morning, there will be a business meeting before the workshop gets under way. The first subject on the discussion program will be "A Survey of Landscape Nurserymen's Business: Prewar 1939 to Postwar 1948," which will be based on reports and analyses of a business questionnaire recently sent to members. To conclude the morning session, slides from the collection of Fred D. Osman, county agricultural agent, Elizabeth, N. J., will illustrate a talk on "Industrial Plantings in New Jersey." A discussion of landscaping in general will follow.

"If I Were a Landscape Nurseryman" will be the title of the first talk on the afternoon session, which will be remarks on the conduct of landscape nurserymen's businesses based on the observations of the speaker, Dr. L. C. Chadwick, department of horticulture, Ohio State University, Columbus.

A talk on "Face Lifting of Our Foundation Plantings" will be illustrated with slides shown by various members, and the discussion will be led by Carl Ray, St. Matthews, Ky. "The Use of Newspaper Ads for Landscape Selling" will be the final subject of the workshop and will fea-



WE WANT TO THANK OUR CUSTOMERS FOR A FINE FALL SEASON

Many items are sold out, but we shall soon have complete information available on what is left for spring sales.

Meanwhile we have the following Shade Trees in good supply:

Oak, in variety.
American and London Plane.
White Ash.
American Elm.
Maple, in variety.

PRINCETON NURSERIES

PRINCETON, N. J.

Phone: Princeton 1776

NORTHERN-GROWN LINING-OUT STOCK

	Per 100	Per 1000
<i>Betula papyrifera</i> , 1 to 2 ft.....	\$6.00	\$50.00
<i>Clethra alnifolia</i> , 6 to 18 ins.....	5.00	45.00
<i>Ilex verticillata</i> , 1 to 2 ft..	5.00	40.00
<i>Syringa vulgaris</i> , 1 to 2 ft..	6.00	50.00
<i>Viburnum cassinoides</i> , 1 to 2 ft.....	6.00	50.00
<i>Viburnum lentago</i> , 1 to 2 ft.....	6.00	50.00

The above stock is first-quality collected lining-out stock.

NURSERY-GROWN HEMLOCKS

	Per 100	Per 1000
<i>Tsuga canadensis</i> , 6 to 10 ins.,		
2-yr. trans.	\$12.00	\$100.00
8 to 12 ins.,		
3-yr. trans.	16.00	150.00
12 to 15 ins.,		
3-yr. trans.	30.00	250.00

Send for complete list of Hardy Native Ferns, Lilies, Orchids, Wild Flowers, Trees, Shrubs and Evergreens.

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RED DUCHESS and other

SUB-ZERO HYBRID TEAS

Large and beautiful as any.
Easy to grow and long to live.
Save replacement expense.
Also Yellow and Orange Climbers.

Write for trade prices to

BROWNELL ROSES

LITTLE COMPTON, R. I.

QUALITY MERCHANDISE AT REASONABLE PRICES

C. L. VANDERBROOK & SON

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MANCHESTER, CONN.

Wholesale Nurserymen Since 1922

KOSTER NURSERY

Division of Seabrook Farms

Wholesale Nurserymen

BRIDGETON, N. J.

Specializing in the propagation of grafted lining-out stock of all kinds. Write for our new list of lining-out stock.

CAMPSIS

(Bignonia)

MME. GALEN

One of the finest hardy climbing vines known. Puts to shame the common "Trumpet Vine." The large ruddy flowers are borne in great clusters, making the vine a solid mass of bloom all summer. Arnold Arboretum says, "While occasionally seen in eastern gardens it is almost unknown in the middle west where Trumpet Creepers grow unusually well. A splendid ornamental vine deserving far wider recognition in American gardens."

Field-grown grafts

	5 or	25 or
	more	more
	each	each
2-year, strong...	\$1.10	\$1.00
1-year, strong...	.80	.75

Have you received our current wholesale list 4849? If not, you should write for it today if you are interested in items that are out of the common run!

W. B. CLARKE & CO.

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SAN JOSE 2, CALIF.

ORNAMENTAL EVERGREENS

Trees & Shrubs

BAGATELLE NURSERY

P. O. Huntington Station, N. Y.

Season's Greetings



**FAIRVIEW EVERGREEN
NURSERIES**

Fairview, Pa.

ORNAMENTAL VINES

Clematis, Honeysuckle, Silver-lace, etc.

Send for our price list.

JAMES I. GEORGE & SON
FAIRPORT, N. Y.

ture a comparison of some of the advertisements used by members. J. Franklin Styer, Concordville, Pa., will lead the discussion.

A. A. N. OFFICERS ON ILLINOIS PROGRAM.

When the Illinois State Nurserymen's Association holds its annual convention January 11 to 13 at the Hotel La Salle, Chicago, the program for one afternoon session will be provided by the American Association of Nurserymen, as has been the custom for several years. The president of the Illinois A. A. N. chapter, William J. Smart, will preside at this session the afternoon of January 11. Both A. A. N. President Howard C. Taylor, East View, N. Y., and Executive Secretary Richard P. White, Washington, D. C., will speak.

In anticipation of the seventy-fourth annual convention of the A. A. N., which is to be held in July at San Francisco, Mr. Smart, also A. A. N. transportation manager, will describe the all-expense convention tour which has been planned by the A. A. N. And representatives of the railroads over whose tracks the A. A. N. special trains will travel, will show color movies of the scenery and interesting places to be seen on the tour.

OHIO SHORT COURSES.

In order to assure ample accommodations for all those who will wish to attend the twentieth annual short course for arborists, landscape gardeners and nurserymen, sponsored by Ohio State University, the course is being divided so that arborists and landscape gardeners will meet January 12 to 14 at the Neil House, Columbus, and the nurserymen will meet there January 18 and 19.

Arborists and Landscape Gardeners.

The short course for arborists and landscape gardeners, sponsored by the department of horticulture, Ohio State University, and the Ohio chapter of the National Shade Tree Conference, will be held entirely at the Neil House, and the program will open immediately following registration from 9 to 10:30 a. m. January 12.

JANUARY 12, 10:30 A. M.

"The Role of Soil Aeration in Tree Growth," by J. Boyd Page, department of agronomy, Ohio State University.

"The Use of Leaf Analysis in the Determination of Fertilizer Requirements of Trees," by F. S. Howlett, department of horticulture, Ohio State University.

JANUARY 12, 1:30 P. M.

"What Makes a Plant Tick?" by Ray-

OUR SPECIALS

Peach, 1-yr. buds.
Willow, Babylon, 6 to 8 ft., 8 to 10 ft.
Willow, Wisconsin Weeping, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft.
Berberis Thunbergi, seedlings, 2 and 3-yr., branched, 6 to 9 ins., up to 18 to 24 ins.
Arbutus American, 2 to 2½ ft., 2½ to 3 ft., 3 to 4 ft.
Juniper, Pfitzer, 2 to 3½-ft., 3½ to 4-ft. spread.
Pine, Mugho, all sizes from 15-in. up to 3 to 4-ft. spread.
Spruce, White, 2 to 2½ ft., 3 to 4 ft., 4 to 5 ft.
Taxus, in variety, 12 ins. up to 2 to 2½ ft.
Asparagus, Paradise, 2-yr., the newest and best variety.
Perennials, strong, field-grown, in a wide assortment of varieties, including a splendid collection of hardy Mums.

Write for prices.

BROWN BROTHERS CO.
Brighton Station,
ROCHESTER 10, N. Y.

DICENTRA SPECTABILIS

Nice Whole-root Clumps.

Immediate, winter or spring, 1949, shipment.

Large forcing size, 5 to 8 eyes and up, 32c.

Regular size, 3 to 5 eyes, 25c.

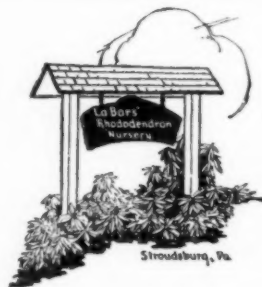
Divisions for potting up or lining out,

\$5.00 per 100, \$45.00 per 1000.

Shipment from Jan. 1 to April 1.

OVERLOOK GARDENS

CENTRAL BRIDGE, N. Y.



HEMLOCK

Rhododendron — Kalmia

Azalea

CURTIS NURSERIES

CALICOON, N. Y.

NARROW-LEAVED EVERGREENS

By L. C. Chadwick

50 cents, postpaid.

Selection of superior varieties of trees, shrubs, vines and ground covers. Lists uses, culture, growth, habits and characteristics for landscape purposes, \$4 pages.

AMERICAN NURSERYMAN

343 S. Dearborn St. CHICAGO 4, ILL.

mond Hasek, department of horticulture, Ohio State University.

"Transplanting Some Difficult-to-move Trees" (illustrated), by E. W. Higgins, Frost & Higgins Co., Arlington, Mass.

"Fertilization Practices," by Norman Armstrong, White Plains, N. Y.

Open discussion on transplanting and fertilization practices, led by L. C. Chadwick, department of horticulture, Ohio State University, assisted by Mr. Higgins and Mr. Armstrong.

JANUARY 12, 7 P. M.

"Selling Landscape Planting and Maintenance Service," by Martin Drescher, W. A. Natorp Co., Cincinnati.

Business meeting, Ohio chapter of the National Shade Tree Conference.

JANUARY 13, 9:30 A. M.

"Can the Elm Bark Beetle and the Phloem Necrosis Leaf Hopper Be Controlled with DDT?" by Russell Whitten, bureau of entomology and plant quarantine, United States Department of Agriculture, Columbus.

"Limitations of Mist Blowers," by A. W. Meserve, United Arborists, Danbury, Conn.

"Control of Some Important Insects of Woody Ornamental Plants," by L. L. English, section of economic entomology, Illinois Natural History Survey, Urbana.

JANUARY 13, 1:30 P. M.

"Lawn Applications of 2,4-D May Damage Trees," by Paul E. Tilford, executive secretary, National Arborist Association, Wooster, O.

"Planting and Maintenance of Lawn Grasses," by F. A. Welton, department of agronomy, Ohio agricultural experiment station, Wooster.

"Trees for City Streets—Program, Selection and Maintenance," by E. W. Scanlon, commissioner of trees, Cleveland.

Open discussion on insects and diseases, 2,4-D, lawns and trees, led by Mr. Tilford.

JANUARY 13, 7 P. M.

Dinner.

"Ohio State University in the Future," by Chester S. Hutchison, associate dean, college of agriculture, Ohio State University.

"New and Unusual Plants" (illustrated), by George Graves, Boston, Mass.

JANUARY 14, 9:30 A. M.

Panel discussion on hardy chrysanthemums, led by D. C. Kiplinger, department of horticulture, Ohio State University, assisted by Thomas Kyle, Bohlander Nurseries Co., Tipp City, and Merle I. Miller, Worthington.

"Hemerocallis," by Mrs. Julia Emigholz, Kenwood Iris Gardens, Cincinnati.

"Worth-while Annuals," by Arthur Hirt, Hirt's Greenhouse, Strongsville.

JANUARY 14, 1:30 P. M.

"Design in Foundation Plantings," by Brooks Wigginton, department of landscape architecture, University of Georgia, Athens.

"Planting Suggestions for Small Homes," by Arnold Davis, director, Garden Center of Greater Cleveland.

Discussion of landscape problems, led by Victor H. Ries, department of horticulture, Ohio State University, assisted by Mr. Wigginton and Mr. Davis.

Program for Nurserymen.

The short course for nurserymen, sponsored by the department of horticulture, Ohio State University, will begin the afternoon of January 18 following morning registration in the horticulture greenhouse on the

SPREADING YEWS

TAXUS CUSPIDATA

	In lots of	
	10 to 24	25 to 100
	each	each
18 to 24 inches.....	\$3.50	\$3.25
24 to 30 inches.....	4.75	4.50

TAXUS MEDIA (Taller growing, good color)

	In lots of	
	10 to 24	25 to 100
	each	each
18 to 24 inches.....	\$3.50	\$3.25
24 to 30 inches.....	4.75	4.50
30 to 36 inches.....	6.25	6.00

All plants compact, three and four times transplanted and sheared. Grown in heavy clay; solid balls. Also, a good assortment of other specimen landscape material.

Truck or Carload Shipments Only.

W. A. NATORP CO.

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LINING-OUT SPECIALS

WILLOW

Wisconsin Weeping

	Per 100	Per 1000
18 to 24 ins.....	\$2.75	\$22.50
2 to 3 ft.....	3.50	30.00
3 to 4 ft.....	4.50	40.00

Niobe Weeping

18 to 24 ins.....	3.00	25.00
2 to 3 ft.....	4.00	35.00
3 to 4 ft.....	5.00	45.00

VIBURNUM AMERICANUM

Am. High-bush Cranberry

1-yr., 2 to 4 ins.....	2.50	20.00
1-yr., 4 to 6 ins.....	3.50	30.00
1-yr., 6 to 9 ins.....	5.00	45.00

BERBERIS THUNBERGI

1-yr., 4 to 6 ins.....	2.00	15.00
1-yr., 6 to 9 ins.....	3.00	25.00

WRITE FOR OUR COMPLETE TRADE LIST.

EVERGREEN NURSERY CO.

Established 1864

STURGEON BAY, WIS.

50 Years

of growing

Rhododendrons

Azaleas

Perennials, Roses

All Nursery Items

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EVERGREENS

Seedlings and Transplants
Spring, 1949

Write for price list.

SUNCREST EVERGREEN NURSERIES
JOHNSTOWN, PA.

The **CHRYSANTHEMUM**
CATALOG you cannot afford
to be without.

WONDERLAND NURSERIES
Ellerson, Va.

ROSEBUSHES

2-year Field-grown

Down Right

Dug Right

Stored Right

Packed Right

Shipped when you want them.

Our refrigerated cold storage and packing facilities are unexcelled.

Write for variety and price lists.

C. E. WILSON NURSERIES

Jacksonville, Tex. Manchester, Conn.

CHINESE CHESTNUT TREES

Blight-resistant.

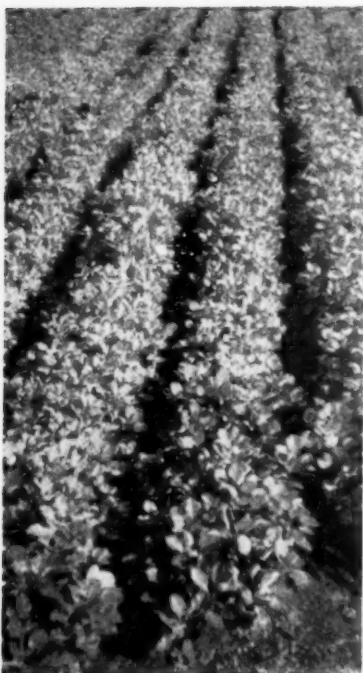
TREES—TRANSPLANTS—LINERS

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Cowen, W. Va.

SPECIAL VALUES FOR NURSERYMEN

Two fine, old-established nursery properties in Florida, very reasonably priced. Also nursery and florists' properties in New York, New Jersey, Conn. and Penna. Good values, priced right.

Write: **HORTICULTURAL REALTY CO.**
135-18 Northern Blvd. Flushing, N. Y.
Dealer to the Florists' and Nursery Trade.



Rhus cotinus seedlings.

TIME TO ORDER FOR SPRING PLANTING!

Two Scarce Items.

Rhus cotinus	Per 100	Per 1000
3 to 6 ins.....	\$ 6.00	\$55.00
6 to 9 ins.....	9.00	80.00
9 to 12 ins.....	11.00	.....
12 to 18 ins.....	17.50	.....
Kolkwitzia amabilis		
3 to 6 ins.....	600	55.00
6 to 9 ins.....	9.00	80.00
9 to 12 ins.....	11.00	.....

NEWPORT NURSERY CO.

NEWPORT, MICH.

VIBURNUM BURKWOODI

New—Fragrant—Hardy
Pinkish-white flowers in May
Heavy pot-grown stock for lining
out. Spring 1949 delivery.

Per 100 Per 1000
2½-in. pots \$30.00 \$250.00
F.O.B. Dayton, Ohio

No charge for packing if check
accompanies order.

THE SIEBENTHALER COMPANY
Dayton 5, Ohio

SUGAR MAPLES

	Per 100
5 to 6 feet.....	\$ 35.00
6 to 8 feet.....	75.00
1¼ to 1½-inch.....	150.00

HAGQUIST NURSERIES
Prairie and Olive Sts., South Bend, Ind.

campus of Ohio State University and informal tours of the greenhouse to see experimental projects in progress, plant materials and plant containers. The afternoon program will be held in Campbell Hall Auditorium on the campus. The meetings that evening and the following day will be at the Neil House.

JANUARY 18, 1:30 P. M.

"Tile Drainage," by Virgil Overholt, department of agricultural engineering, Ohio State University.

Panel discussion on soil productivity practices, led by L. C. Chadwick, department of horticulture, Ohio State University, assisted by Don Hover, Soil Conservation Service, Warren, "Progress in Lake County"; John Siebenthaler, Siebenthaler Co., Dayton, "Trees," and Melvin Wyant, Mentor, "Roses."

"Recent Investigations of Insect Pests of Nurseries" (illustrated), by R. B. Neiswander, department of entomology, Ohio agricultural experiment station, Wooster.

JANUARY 18, 7:30 P. M.

Colored movies of nursery practices, by Norman Scott, Brookdale-Kingsway, Ltd., Bowmanville, Ont., Canada.

"Some Woody Ornamentals," by L. C. Chadwick.

JANUARY 19, 9:30 A. M.

Panel discussion of roses, led by Walter Burwell, Burwell Nursery Co., Columbus. Choice of varieties to be discussed by Paul Bosley, Bosley Nursery Co., Mentor; Gerard Klyn, Mentor; John Siebenthaler, Siebenthaler Co., Dayton, and Melvin Wyant, Mentor.

"Garden Maintenance," by Victor H. Ries, department of horticulture, Ohio State University.

"The Best in Hollies," by Paul Bosley, Bosley Nursery Co., Mentor.

JANUARY 19, 1:30 P. M.

"Business Trends," by M. G. Smith, department of agricultural economics, Ohio State University.

"Twenty Years of Experimental Progress in Ornamental Horticulture at Ohio State University," by Alex Laurie, department of horticulture, Ohio State University.

OHIO PROGRAM.

Two days devoted to informative talks, a motion picture in color, business and entertainment have been planned for the annual convention of the Ohio Nurserymen's Association, to be held January 20 and 21, at the Neil House, Columbus.

The opening session Thursday morning will be called to order at 10 a. m. by President Walter Truby and will be devoted to matters of business, including the report of Secretary John D. Siebenthaler and those of committees, including those by Bert Kleinmaier, local; C. O. Siebenthaler, legislative, and G. Walter Burwell and Elmer Hartman, research program at Ohio State University.

Reconvening at 2 p. m., the convention will hear "A Report on Pest Control in Ohio Nurseries," by John W. Baringer; a talk on "Practical Points in Designing Small Land-

CHERRY TREES

We have 30,000 in surplus; mostly Montmorency and a few hundred Early Richmond and Kansas Duke.

Per 100

9/16 to 11/16-in., 3 ft. and up...\$60.00

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5/16 to 7/16-in., 2 to 3 ft.....30.00

Packing free, 30 at 100 rate. These are No. 1 trees, well branched. Please place your order now (for delivery on your specified date) so we will know how many to dig.

CHINESE ELMS

1 and 2-year-old Per 1000

9 to 12 ins.....\$ 6.50

12 to 18 ins.....11.00

18 to 24 ins.....15.00

2 to 3 ft.....20.00

3 to 4 ft.....35.00

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These trees are extra-nice and well rooted. Place your order now for early spring delivery.

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2-year-old, No. 1, large.....\$8.00

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Deciduous Trees,
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BOXWOOD GARDENS

Mrs. R. P. Royer

High Point, N. C.

scapes," by Carl F. Wedell, head of the school of horticulture, Long Island Agricultural and Technical Institute, Farmingdale, N. Y., and a talk by Edward H. Scanlon, editor of Trees magazine and commissioner, division of shade trees, Cleveland, on "Preferred Shade and Ornamental Trees for City Streets and Park Use." Following the election of officers, the meeting will adjourn until 7 p. m., when the seventeenth annual "Ye Olde Tyme Dinner" will be held in the Grand ballroom. All conventioners should be sure to bring their jeans or aprons to wear to this gala event.

When the meeting reopens at 10 a. m. Friday morning, the first speaker will be Dr. A. M. S. Pridham, department of floriculture and ornamental horticulture, Cornell University, Ithaca, N. Y., who will speak on "Experiences on My Recent Trip to Australia and New Zealand." The color motion picture, "A Year in the Nursery," which depicts year-around nursery activities, with the emphasis on soil conservation work, at Mount Arbor Nurseries, Shenandoah, Ia., will be shown. Concluding the meeting will be a report on "The Progress of Plans for Moving the College of Agriculture at Ohio State University" by L. L. Rummell, dean of the college of agriculture and director of the Ohio agricultural experiment station.

After luncheon, members of the Ohio chapter No. 1 of the American Association of Nurserymen will hold their annual meeting.

CONNECTICUT TREE PROTECTIVE MEETING.

The twenty-seventh annual meeting of the Connecticut Tree Protective Association will be held January 19 at the Hotel Garden, New Haven. All those outside Connecticut who plan to attend the meeting should notify the secretary, John Woodruff, Oscar Warner Co., 24 East Aurora street, Waterbury, Conn.

PENNSYLVANIA MEETING.

Announcements of the 1949 winter meeting of the Pennsylvania Nurserymen's Association, January 25 and 26 at the Bellevue-Stratford hotel, Philadelphia, have been mailed to members by Secretary Albert F. Meehan, who states that all nurserymen are welcome to attend. He asks that those making reservations at the hotel state in their request that the accommodations are wanted for the nurserymen's meeting. The program

FLOWERING CRABS and FRUIT TREES

Malus ioensis, Atrosanguinea, Floribunda, Aldenhamensis, Coronaria and Hops.
5 to 6 ft., 85c each; 6 to 7 ft., \$1.25 each.

WHITNEY CRAB

1 1/4-in., \$1.15 each; 1 1/2-in., \$1.50 each.

SARGENT CRAB

6 to 7 ft., \$2.25 each.

PEARS

Bartlett, Clapp Favorite, Flemish Beauty, Duchess.

1-in., \$1.00 each; 1 1/4-in., \$1.35 each.

APPLES

Red and Yellow Delicious, Early Harvest, Jonathan, Yellow Transparent, Wealthy, Golden Russet, Baldwin, Northwestern Greening, Northern Spy.

1-in., 75c each; 1 1/2-in., \$1.50 each.

Prices F.O.B. Addison, Ill.

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Merry Christmas Season

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Florida-grown ROSES do best in the Southeast.

Shipped in bulk or individually wrapped for over-the-counter sales.

Florida-grown PECANS are right for Dixie planters.

Florida-grown GRAPES are unsurpassed in the land of corn and cotton.

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ROSEBUSHES

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TYLER, TEXAS

PECAN TREES

Commercial grove or landscape.

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30,000 Potted Taxus Liners

1, 2 and 3-year.

Weigela Eva Rathke, transplants.
Viburnum Rhytidophyllum.

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MT. STERLING, KY.

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Ask for our full list of lining-out stock.

We are quoting on our good supply of the above and many other liners.

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Christmas Greetings

TO

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IN THE TRADE

We thank you for your many past favors and hope you will enjoy a fine Spring season.

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The Monroe Nursery
MONROE, MICH.

AMERICAN REDBUD

Top-quality stock in sizes from 2 to 8 feet.

Write for Price List.

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YOUR PROFITS GROW IN
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**SEMME'S
NURSERIES**

AZALEAS - CAMELLIAS
and other choice evergreens.

Wholesale Catalog SEMMES, ALA.

will open with a forum, as this feature proved so successful at the preceding meeting.

PLAN PENNSYLVANIA NURSERY CONFERENCE.

The Pennsylvania nurserymen's conference will be held February 15 to 17 at Pennsylvania State College, State College, Prof. R. P. Meahl, department of horticulture, has announced. Open to all nurserymen, the conference will cover phases of plant culture, pest control and the utilization of nursery material.

NEW ENGLAND PLANS.

Following the suggestion of the membership, there will be no banquet or special entertainment planned for the convention of the New England Nurserymen's Association, February 1 to 3, at the Hotel Statler, Boston, Mass. Instead, there will be luncheons each day, and the registration fee will cover their cost as well as all other privileges of the convention.

The afternoon of the opening day of the convention Howard Taylor, president of the American Association of Nurserymen, and Peter Cascio, A. A. N. executive committeeman for region I, will speak on the activities of the national association.

The second day will be devoted to an educational program, under the chairmanship of Cliff Corliss. It will be a departure from last winter's educational program in that it will be in the form of panel discussions by prominent members of the trade on such subjects as how to prepare stock better for planting on the customer's property and on how to satisfy the customer. Also included will be a panel entitled "The Foreman Talks Back." It is hoped that all member firms will invite their employees to this session, a practice which has proved valuable in past years.

Members are invited to display either in their exhibit spaces or elsewhere at the meeting any new plant varieties which they have to offer or are in the process of growing for future use in the trade. President Arthur Webster and Secretary Louis Vanderbrook have also extended a cordial invitation to nonmember nurserymen in New England and in other areas to attend the convention.

PLAN ST. LOUIS SHOW.

At a meeting, November 3, of the board of directors of the St. Louis Flower Show Association, flower ex-

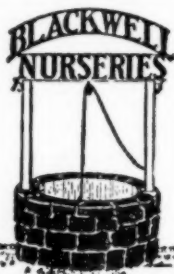
SHRUB SPECIALS

Per 100

Berberis Thunbergi (transp.), 18 to 24 ins.....	\$20.00
Cydonia (Jap. Quince), 18 to 24 ins.....	25.00
Forsythia Intermedia , 2 to 3 ft.	30.00
Hydrangea P.G. , 2 to 3 ft.....	45.00
Snowball , 2 to 3 ft.....	45.00
Spiraea A. Waterer , 15 to 18 ins.....	25.00
Viburnum Americanum , 2 to 3 ft.....	35.00
Viburnum Opulus , 2 to 3 ft....	35.00
Viburnum Lentago , 2 to 3 ft..	30.00

Above stock in storage. Order now for immediate or early spring shipment.

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**HEAVY 2-YR. SHRUBS
FRUIT TREES**

SPECIMEN EVERGREENS

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Oklahoma City 1, Okla.

IN CARLOTS

American Elm, 1 1/4 and 1 1/2-in.
 Thurlow Willow, 5 to 6 ft., up to
 1 1/2-in.

Apple, 2 and 3-yr., XX,
 11/16 and 9/16-in.
 Peach, 5/16 up to 9/16-in.

Lesser Quantities of:

Pear, Plum and Cherry.

Berberis Thunbergi, 12 to 18 and
 18 to 24 ins.

Forsythia, Honeysuckle Bush,
 Spiraea and Symphoricarpos in
 variety.

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 FOREST AND SHADE TREES
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GRAFTS**

for Spring, '49, delivery.

Write for list of varieties
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BURTON'S

HEADQUARTERS FOR
 EVERGREEN GRAFTS, TRANSPLANTED
 EVERGREENS, SHRUB LINERS.
 RARE ITEMS YOU DO NOT
 FIND IN MOST LISTS! *Write!*

HILLTOP NURSERIES
 CASHTOWN, OHIO

hibits and their placement in an over-all drawing to be made by Carl Giebel, superintendent of installation of the show, were planned for the 1949 St. Louis flower show. The city park department has decided to stage a feature exhibit entitled "Time to Plant Your Garden," in which plants are to be arranged to represent a large, round clock. Henry Ochs stated that this clock would be electrically operated.

George Pring said that while he was in England he had made tentative arrangements for a special orchid exhibit to be flown to the show. And he gave a report on how flower shows are staged in England.

It was voted to allow the University of Missouri a total of 600 square feet, in the form of three 200-foot areas, with each garden to be allotted a premium of \$200. The schedule of entries for the show and the plan for trade spaces was also approved.

Starting date for advance ticket sale was set for January 3; 40,000 tickets are to be printed and 30,000 offered for sale.

**NURSERYMEN RESCUE
COLLEAGUE'S ROSES.**

Some thirty nurserymen, members of the North Jersey Metropolitan Nurserymen's Association, turned good Samaritans November 16 to rescue from frost the rose crop of their colleague, Harry Deverman, Clifton, N. J., who was confined to Passaic General hospital with an undetermined illness. Acting on the suggestion of Russell Jacobus, the nurserymen began arriving at the Deverman nursery at 8 a. m. and worked until nearly dark to complete the job of heeling in some two acres of rose-bushes. Some of the nurserymen had put in preliminary work on the project the two preceding days. Two Passaic county farmers caught the spirit of the good deed and brought over a plow and tractor to facilitate operations.

UNTIL February 15 Lynn E. Rogers, Lyndale Nursery, St. Charles, Mich., will be at Sebring, Fla.

BRAMPTON NURSERY, Toronto, Ont., Canada, is building a new office building beside its green-houses.

HAROLD WELCH, vice-president of Mount Arbor Nurseries, Shenandoah, Ia., is seriously ill at the Methodist Hospital, Omaha, Neb., where he underwent a major operation December 6. Mr. Welch has been in ill health for several weeks.



Growers of a complete
 line of deciduous and
 coniferous species.

JEWELL NURSERIES, INC.
 Lake City, Minn.

Northern-grown Stock

Send
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 List.

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**ORNAMENTALS
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Wholesale growers of a
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THE WAYSIDE GARDENS
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WELLER'S PERENNIALS

With That Wonderful Root System
 Headquarters for

HARDY MUMS AND PHLOX.
 Ask for our Perennial Catalog.
WELLER NURSERIES CO., Inc.
 Leading Perennial Growers
 HOLLAND, MICH.

BECOME SOLE OWNERS OF WILLIS NURSERY CO.

John J. Pinney and Harold S. Crawford became sole owners of the Willis Nursery Co., Ottawa, Kan., November 8, when they purchased from Mrs. A. E. Willis the one-third share in the business that she inherited from her husband, who died August 8.

The corporation which had operated the nursery since 1928 was dissolved January 1, 1945, and the assets were taken over by A. E. Willis, John J. Pinney and Harold S. Crawford, as equal partners. Mr. Pinney has been with the firm since 1924 as sales manager. He is a graduate in horticulture from the University of Wisconsin and comes from a family of nurserymen. His brothers, Tom and Clarence, operate the Evergreen Nursery Co., Sturgeon Bay, Wis., a business started by their grandfather, George Pinney, in 1864, and conducted for many years by their mother, Mrs. Martha Pinney, after the death of her husband. Mr. Pinney is married and has five children, three in college and two at home.


Mr. Crawford is a graduate in horticulture of Kansas State College and joined the Willis Nursery Co. in 1930 as salesman. Like Mr. Pinney, he comes from a family of nurserymen. His grandfather, the late H. H. Kern, owned the Bonner Springs Nursery, Bonner Springs, Kan., and was well known in the horticultural circles. Mr. Crawford is married and has three children, all at home.

The Willis Nursery Co. was started in 1872 by A. Willis, who came to Kansas from Wisconsin. About 1920 he sold the business to his son, Arthur, and his daughter, Ola, who conducted it as partners until Ola's death in 1927. In 1928, the business was incorporated as the Willis Nursery Co.

Originally the production of the firm was sold through retail salesmen, but for the past thirty years most of the sales have been on the wholesale market, with customers in every state as well as in Canada and Mexico. Six years ago a retail mail-order department was added.

Several hundred acres of land are devoted to the production of a complete line of nursery stock, both fruit and ornamental. A large greenhouse is the center of propagating operations for shrubs, evergreens and perennials. There are two large storage houses, one of which is served by a spur of the main line of the Santa Fe railway.

The present owners will retain



ROSES

For Forcing or Rose Gardens

TWO-YEAR, FIELD-GROWN

(Budded on Japonica Multiflora)

These Roses are GROWN RIGHT—GRADED RIGHT—SHIPPED RIGHT.

ORDER TODAY FROM THIS AD.

PRICES

500 Lots and over: No. 1, 40c; No. 1½, 30c; No. 2, 25c.
 100 to 500 lots: No. 1, 45c; No. 1½, 35c; No. 2, 30c.
 Orders for less than 100 Roses: No. 1, 50c; No. 1½, 40c; No. 2, 30c.

ORDER GROUPS OF 10. WE DO NOT BREAK BUNDLES. We will wrap these Roses in individual packages and label for an additional 5c each.

TERMS: CASH WITH ORDER AND NO CHARGE FOR PACKING. WE WILL, HOWEVER, ACCEPT 35% WHEN ORDER IS PLACED—BALANCE C.O.D. PACKING CHARGES ON ALL C.O.D. ORDERS.

REDS

Red Radiance
 Etolie de Hollande
 Polinsettia
 Ami Quinard
 E. G. Hill
 Rouge Mallerin
 Grenoble

PINKS

Pink Radiance
 Editor McFarland
 Columbia
 Mrs. Charles Bell

WHITES

Konigin Luise
 K. A. Viktoria
 Caledonia

YELLOW

Golden Dawn
 Luxembourg
 Golden Ophelia
 Soeur Therese
 Yellow Talisman

CLIMBING ROSES

Paul's Scarlet
 Red Radiance

VARIGATED or MULTICOLORED

Betty Grace Clark
 Edith Nellie Perkins
 President Hoover
 Talisman

POLYANTHAS

Else Poulsen
 Golden Salmon
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ORDER TODAY FROM THIS AD.

Delivery made now or in Spring

OZARKS PLANT FARMS, INC.

543A Seminole Drive SPRINGFIELD, MO.

WE OFFER FOR IMMEDIATE SHIPMENT

	Per 10	Per 100
Cornus Rubra (Pink-fl. Dogwood), 18 to 24 ins.	\$10.00	...
Forsythia Fortunei, 18 to 24 ins.	1.25	\$10.00
Althaea, dbl., red, 18 to 24 ins.	1.00	7.50
Ibolum Privet, 18 to 24 ins.	1.00	7.50
Spiraea Reevesiana, 18 to 24 ins.	1.50	12.00
Spiraea Vanhouttei, 18 to 24 ins.	2.00	15.00
Weigela Nana Variegata, 18 to 24 ins.	2.00	15.00
Weigela Rosea, 18 to 24 ins.	2.00	15.00
Liriodendron Tulipifera (Tulip Tree), 6 to 8 ft.	8.00	75.00
Clematis Virginiana, heavy, 18 to 24 ins., 2-yr.	2.00	15.00
Vinca Minor, heavy, 2-yr. clumps	1.00	8.00
Buddleia Magnifica (Butterfly Bush), 2 to 3 ft.	2.00	15.00
Cercis Canadensis (Judas Tree), 4 to 5 ft., br.	5.00	30.00

SEE OUR ADVERTISEMENT ON LINING-OUT STOCK
IN THE CLASSIFIED SECTION.

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McMINNVILLE, TENN.

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GULDEMOND'S

Newport, R. I.

Holland-grown Trees, Shrubs, Evergreens, Perennials, Forcing Plants.

Write for HOLLAND PLANT LIST.

Representing Guldemond & Co., Boskoop, Holland.
Since 1874.

Peter Grootendorst J. M. Son

BOSKOOP, HOLLAND

Exporters of Nursery Stock since 1898

Rhododendrons, Azaleas, Shrubs, Trees, Peonies, Liners, etc.

Catalog free on application.

the name Willis Nursery Co. and contemplate no change in policy nor personnel. Mr. Pinney is in charge of sales, and Mr. Crawford directs production.

THE East Coast Greenhouses, a wholesale floral service at Kingstree, S. C., of which Evans N. Guyton is general manager and J. W. Swittenberg is grower, has started a nursery department.

AN 80-acre farm on the Saline road near Ann Arbor, Mich., has been purchased by Andrew G. Heise and family on which to continue their nursery business, Edgehill Nursery, on a larger scale. Over eight acres of evergreens have been lined out this fall, and they hope to line out five to ten acres each year. The Heise family was the former owner of the Ann Arbor Nursery, which it sold in 1946.

CHRISTMAS TIME— Is Almost Here!

We offer Native Evergreens for decorations as well as planting stock. Good root systems, nice foliage, gathered fresh as orders received.

Shipped preferably via express or parcel post, packed in moss.

ILEX OPACA, American Holly.

TSUGA CANADENSIS, Canadian Hemlock.

KALMIA LATIFOLIA, Mountain Laurel.

JUNIPERUS VIRGINIANA, Red Cedar.
Per 100 Per 1000

3 to 6 ins., sdgls. \$2.00 \$15.00

6 to 9 ins., sdgls. 3.00 25.00

9 to 12 ins., sdgls. 4.00 30.00

12 to 15 ins., sdgls. 5.00 45.00

15 to 18 ins., sdgls. 7.00 60.00

18 to 24 ins., sdgls. 8.00 75.00

These prices quoted F.O.B.

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2 per cent discount for cash with order.

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We Welcome Your Want List.
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COMPLETE ASSORTMENT OF

Evergreens, Fruit Trees, Shade
Trees, Roses and Lining-out Stock.

Write for complete list.

ONARGA NURSERY CO.
Onarga, Ill.

TREES

L.O. Seedlings, Shades, Ornamental
Stock, Evergreens.

Red Cedar seedlings, Hemlock, Maple,
Dogwood, Tulip Poplar, Willow, Oak,
Shagbark Hickory.

Write for Wholesale Price List.

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**HEAVY, 2-YEAR SHRUBS
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Write for wholesale trade lists.

THE ARNOLD C. CLARK NURSERY

Route 2 McMinnville, Tenn.

10,000 Apple, Peach, Apricot and
Cherry, 2 and 3-yr. 12,000 Amur River
North Privet, 2-yr. 200 each, American
Ash, Liquidambar, 1 1/2 to 3-in. caliper.
Apple, Pear, Quince and Flowering
Crab grafts.

EGYPTIAN NURSERY & LANDSCAPE CO.
FARINA, ILL.

OBITUARY

Mrs. W. Atlee Burpee, Sr.

Mrs. W. Atlee Burpee, Sr., widow of W. Atlee Burpee, who founded W. Atlee Burpee Co., Philadelphia, Pa., in 1876, died at that city November 10 at the age of 85.

Surviving are two sons, David, president of the firm, and W. Atlee, Jr., vice-president and treasurer; five grandchildren, and three great-grandchildren.

Mrs. L. E. Havnes.

Anna Marie Havnes, wife of L. E. Havnes, of Havnes Landscape Co., Brainerd, Minn., died November 10 at St. Joseph's hospital there after a 2-week illness with a heart ailment. Born June 20, 1899, at Little Falls, Minn., Mrs. Havnes practiced nursing at St. Mary's hospital and the University hospital, Minneapolis, before her marriage to Mr. Havnes, May 26, 1922, at Belle Prairie.

Besides her husband, there survive three sons, Ellsworth B., a student at the University of Utah; James E., a student at the University of Minnesota, and Thomas W., at home; four daughters, Mrs. Wilbert Smith, Jr., Brainerd; Mrs. Maurice Cain, Brainerd; Delores P., Minneapolis, and Fern Anne, at home, and one grandson.

THE Lockport Flower Farm has moved from 20 Wadsworth street, Buffalo, N. Y., to 575 Market street, Lockport, N. Y.

A GRADUATE in horticulture from Cornell University, John Patrick Kidd is starting a nursery at Forestville, N. Y.

OPENED last spring, Canale's Nursery, Indiana, Pa., has cut 7,000 Christmas trees for shipment this year. Several acres of land are planted in nursery stock now, and next year many fields now planted in agricultural crops will be utilized for nursery purposes. The business is owned by Joseph Canale, who operates a similar nursery at Youngstown, O., and is under the management of Gene Bricillo. The trees being shipped this year were purchased from private growers, and Mr. Canale has purchased several farms in Indiana county, Pennsylvania, which will be used for growing Christmas trees. This county is one of the largest Christmas tree-producing areas in the United States.

VUYK VAN NES

BOSKOOP HOLLAND

Originators of Azalea Vuykiana (Hardy Dutch Hybrid Azaleas), large-flowering, bloom with foliage; in one white variety and several in nonfading colors.

Propagators and growers of choice nursery stock. All types of Azaleas, Rhododendrons and other broad-leaved Evergreens, Conifers, Roses, Shrubs and Perennials.

Exports to the U. S. A. receive special preparation, cleaning and packing for best results. All stock carefully graded. New York office handles all import details at no extra cost.

Please direct all your correspondence to:
140 Cedar Street New York 6, N. Y.

VUYK VAN NES NURSERIES

"BRODLEAF" HOLLAND PEAT MOSS

PROPERLY MATURED—REMILLED
THE QUALITY EXCELLENT.

ATTRACTIVE PACKAGES

Ready to use—or sell retail

10 Large 3 1/2-bushel Bags \$15.00

20 Large 3 1/2-bushel Bags 29.00

50 Large 3 1/2-bushel Bags 70.00

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CALIFORNIA ASSOCIATION OF NURSERYMEN

ELMER J. MERZ, Executive Secretary
304 MITAU BUILDING SACRAMENTO 14, CALIF.

EXECUTIVE SECRETARY'S YEAR-END REPORT.

While most businesses are looking forward to the Christmas season with its great rush of business, nurserymen throughout California are looking ahead to the start of the big winter and spring planting season which follows the holidays. While some business comes to the nursery industry in California as a result of the tremendous holiday spending, the industry does not profit to the extent of other lines of business, although the industry does make an effort to sell the idea of living plants as permanent Christmas gifts. The response is not so widespread as the industry would like to see and, therefore, its interests are not so much on the holiday season but the season that follows.

Roses, fruit trees, shade trees and other deciduous nursery stock are being dug at this time of the year throughout the state and will soon be in the nurseries for retail sales. The months of January, February and March will represent the peak selling period for all classes of deciduous nursery stock in addition to the sale of all canned and balled material, which represents a big share of the nursery business done in California.

The tremendous growth of population in California has placed the nursery industry in the enviable position of finding it difficult to meet the demand for its products. There appears to be no surplus of any of the main selling items this year, nor at the moment do there appear to be any shortages. The supply should be sufficient to take care of the normal demand expected this year, and every indication points to a good year for all classes of nursery stock.

The state legislature will go into session after the first of the year, and it is expected that the usual bills affecting agriculture will be presented. At this writing there is no indication of any legislation that might prove harmful to the nursery industry, but the state association will be prepared for anything that might develop.

Satisfactory progress is being made in the application of the pinto tag agreement between county agricul-

tural commissioners. Fifty of the fifty-eight counties have entered into an agreement that permits a freer movement of nursery stock to those nurseries that qualify for the use of the pinto tag. The pinto tag in effect releases nursery stock shipped intra-county without inspection at destination, but pinto tags are not made available to a nursery until it has been thoroughly inspected and given a clean bill of health, as it were.

County agricultural commissioners of the state met at Sacramento December 8 and 9, at which time many of the problems confronting the nursery industry were discussed.

Seventeen new members were signed up for the California Association of Nurserymen in November, bringing our membership to an all-time peak. A membership drive is being conducted by all ten chapters of the state association, with a goal of 600 members set by the time of our convention in

1949. If the November drive is sustained, this goal will be passed.

Jack McDonnell, McDonnell Nursery, Oakland, general chairman for the convention of the American Association of Nurserymen, has appointed all his committees, and all are now functioning. Nurserymen in the state promise members of the A. A. N. an outstanding convention. The welcome sign will be out here in California, and we urge every member of the A. A. N. to plan on making this trip to California to attend the A. A. N. convention at San Francisco in July.

In closing this report, the office of the executive secretary of the California Association of Nurserymen wishes to extend to all nurserymen everywhere from all nurserymen in California best wishes and a Merry Christmas and a Happy New Year.

Elmer Merz, Exec. Sec'y.

SAN JOAQUIN MEETING.

After forty-six members and guests had enjoyed a pleasant meal, the November 13 meeting of the San Joaquin Valley Nurserymen's Association was called to order by President Cliff Oliver. The guests were introduced and included Frank James, president of the California Association of Nurserymen, and Mrs.

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LOVELL PEACH PITS

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Well known to the nurserymen of the country.

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We Offer a Complete List of HARDY TREE SEEDS

Write for a list of
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Send for Our Seed List.

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"Supreme" Quality
SEEDS — PLANTS — BULBS

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SEEDS

Collectors of Tree, Shrub and
Wild Flower Seeds
Crude Drugs and Ornamentals

E. C. MORAN Stanford, Mont.

James, Oakland; James Clark, president of the Central chapter of the state association, and Mrs. Clark, San Jose, and Elmer Merz, executive secretary of the state association, Sacramento.

Mr. James reported that he was just completing a circuit of several of the state association chapters in southern California and had found that everyone was well pleased with the work of the state office. He announced that almost all of the state committees would continue as usual. Willis Stribling was named chairman of the membership committee for this district.

Syd Whitehorn, vice-president of the state association, was called upon for a speech, but he reported that he had said enough already and sat down.

In his talk, Mr. Merz reprimanded the San Joaquin Valley Nurserymen's Association for referring to itself as such instead of as a chapter of the state association. It was pointed out to Mr. Merz that this chapter was one of the few if not the only chapter belonging to the association that did not have a delinquent member and that if its dues were paid up promptly it should be allowed a little individuality.

An Australian auction netted the chapter \$50.54 for its annual Christmas party, which was set for December 11 at Fresno and to which each member was urged to bring a guest. Virgil Cripe, Secy.

SAN DIEGO MEETING.

Members of the San Diego chapter of the California Association of Nurserymen held a dinner meeting November 18 in the Amber room of the Imig Manor hotel, San Diego. Fred Wylie, nature photographer, showed color slides of unusual plants and insects.

CALIFORNIA NOTES.

Peters & Wilson Nursery, Millbrae, has purchased a set of portable stands on which to display flats of plants. Each stand holds about ten flats and brings the flats up to waist level so that prospective buyers may see the plants in the flats more easily.

Granville Esch, son of E. L. Esch, Esch Nursery, San Jose, is an announcer for radio station KBEE, Modesto. He was in the navy during the war and since has become an expert on television.

The Solano county board of supervisors has appointed George A. Pohl, Madera county, as agricultural commissioner, to replace C. W. Wren,

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Two-year Apple

One-year Peach, Plum, Apricot and Cherry

Apple and Pear Seedlings—Our blocks of seedlings are on brand-new land. Free from aphids and other insect pests.

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1-year Rooted Cuttings, 2 and 3-year Nursery Plants, all varieties.

Propagated from stock taken from our own productive farms.

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Growers of Blueberries Since 1920.

SMALL FRUIT PLANTS

Thirty varieties of Grapes including the

GOLDEN MUSCAT

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Currants and Berry plants

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Evergreens, Fruit Trees, Shrubs, etc.

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GRAPE CUTTINGS

Price per 1000.

Concord, \$5.00; Niagara, \$5.50;

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Wire-bound, 100 per bunch, expertly cut. Packing free.

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Leading varieties of
June Bud Peach and one-year Apple.
Under 1 foot.....\$ 40.00
12 to 18 inches..... 60.00
18 to 24 inches..... 80.00
2 to 3 feet..... 125.00

Write for very low prices on large
Peach, Apple, Pear and Plum.
2-year, No. 1 Concord Grapes, \$75.00
per 1000.

Leading varieties of Raspberry, Boysenberry, Blackberry and Dewberry.
BEST 2-YEAR SHRUBS at very low prices: Red Barberry, Coral Berry, Honeysuckle, Golden Bell, Spiraea V.H., Spiraea Billiard, Golden Weeping Willow, Mock Orange and California and Amur River North Privet.

SHADE TREES: Chinese Elm, American Elm, Sugar Maple, Sycamore, Red-bud and White-flowering Dogwood. Sizes, 2 to 10 feet.

EVERGREENS

Red Cedars, (Beautiful trees, collected.)
5 to 10 inches.....\$20.00 per 1000
10 to 15 inches..... 35.00 per 1000
15 to 24 inches..... 7.50 per 100
2 to 3 feet..... 12.50 per 100
3 to 4 feet..... 17.50 per 100
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Peach Trees, 1-year-old stock, all grades and latest popular varieties.

Plums and Apricots—we still have a good supply.

Cherry Trees, Early Richmond and Montmorency.

Shade Trees and Evergreens.

A few good Pecans and Roses.

June Bud Peaches, now ready for sale. Good lot of varieties.

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Concord, Fredonia, Niagara, Catawba, Delaware, Brighton, Worden, Agawam, Caco.

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GRAPEVINES, CURRANTS, GOOSE-BERRIES and BERRY PLANTS.

All varieties of Small Fruit Plants drastically reduced. Write for special quotations on quantity lots.

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CONCORD and FREDONIA, \$4.00 per 1000, F.O.B. here. Tied with wire, 100 to bunch. Guaranteed true to name. Cut from our young, thrifty vineyard by experienced workmen.

IDEAL FRUIT FARM

Stillwell, Okla.

who retired December 1. Mr. Wren was the oldest, in years of service, of the state's fifty-some agricultural commissioners. He plans to take a long rest. Mr. Pohl has been commissioner in Madera county for five years and before that was nursery inspector in San Bernardino county since 1923.

Max Leonard, San Mateo county agricultural commissioner, recently vacationed in northern California and southern Oregon.

At a recent meeting the home gardening class at San Mateo Junior College, conducted by Stanley Pitcher, landscape architect, discussed ornamental shrubs. James Wilson, Peters & Wilson Nursery, Millbrae, spoke on types and varieties of shrubs for home plantings. All the shrubs discussed were on display in the classroom and included material not frequently seen but nevertheless well adapted to the area.

Strawberry acreage in the bay area is expected to reach its prewar peak of 4,000 acres in 1949. It is now about 2,500 acres. Together with increased plantings in other parts of the state, the state's total acreage will be far above that of prewar years. It is expected that the increased production will be absorbed locally because of the increase in population and the higher consumption of luxury food items.

Del Rancho Fortuna, McFarland, owned and operated by T. A. Sand, recently announced another merchandising plan. It is offering a grower-to-consumer deal through local nurseries. By this plan a customer orders plants at his local nursery, the order is forwarded to Del Rancho Fortuna and is shipped by that firm directly to the customer, but it is billed to the local nursery at wholesale prices. The local retailer thus is able to move more stock without the investment in a large inventory. He, of course, is responsible for collections.

W. E. Silva, Sebastopol, has applied for a patent on a new strawberry.

A new freestone peach, discovered as a sport, has been patented by A. L. Martin, Winters.

One of the exhibits which won several awards at the San Mateo County Floral Fiesta, but which was not included in the account of the show in a recent issue, was that of Peters & Wilson Nursery, Millbrae. Entitled "A Subtropical Garden," the exhibit showed many kinds of semitropical plants that may be grown in the bay area. The exhibit was tastefully arranged to represent a backyard. A high brick wall served as a background, and walks were care-

150,000 PEACH TREES

Grown in the Famous Lake Erie Region

Guaranteed Satisfactory

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Send us a list of your needs for Spring or Fall. We will quote you low whole-sale prices on the following grades:

11/16-in. caliper, 5 to 6 ft. tall
9/16-in. caliper, 4 to 5 ft. tall
7/16-in. caliper, 3 to 4 ft. tall
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Buds taken from fruiting orchards. We offer the following varieties: Elberta, Golden Jubilee, Redhaven, Redelberta, Halehaven, Fertile Hale, J. H. Hale, Valiant, Vedette, Lemon Free, Salberta, Cumberland, Champion, Late Red, Oriole, Rochester, Belle of Georgia.

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STRAWBERRY PLANTS

All Leading Varieties

We ship direct to your customers if you desire.

EVERGREENS

Spruce, Pfitzer Juniper, Taxus Capitata, Andersoni and Cuspidata.

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STILL AVAILABLE IN QUANTITY

Such Items As:

Latham Raspberries, No. 1 and 2.
Chipman's Canada Red Rhubarb
New Rhubarb (Valentine)
Pixwell Gooseberry, 2-1 and 1-1
Red Lake Currant, 2-1.
Plum and Bush Cherry, seedlings.

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We have a large stock of cultivated blueberry plants from 1 to 4 years old. Best varieties. State inspected. Write us for quantity prices.

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Can do divisions or clumps by the carload at special prices.

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FRUIT TREES, 2-year A GOOD LINE FOR '49

We offer a good assortment of 2-year-old **FRUIT TREES**. Apple, Std. and Dwarf Pear, Sweet and Sour Cherry, Quince, Plum and Prune, including a good supply of nice **Stanley Prune**, one-year **Peach**.

We shall be pleased to receive your list of wants for low quotations on **HARDY, UP-LAND-GROWN TREES**.

Carload lots a specialty.

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We will deliver any order of 10,000 or more plants direct to you. (Radius of 1,000 miles.)

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VICTORIA RHUBARB ROOTS

	Per 100	Per 1000
1 1/2 to 2-in.	\$7.50	\$50.00
1 to 1 1/2-in.	5.00	35.00
3/4 to 1-in.	3.50	22.50
1/2 to 3/4-in.	2.50	15.00
WASHINGTON ASPARAGUS		
3-yr., heavy	3.00	20.00
300 or more at 1000 rate.		

ASHCRAFT PLANT NURSERY, Copemish, Mich.

GRAPE CUTTINGS

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STRAWBERRY PLANTS

Everbearing Varieties.

Hardy, Montana-grown, No. 1 plants.
Wholesale

McNeal Berry Nursery
HAMILTON, MONT.

fully laid out through the lawn area. A. William Huebsch, landscape contractor, designed and executed the exhibit.

H. W. Schwalm, assistant county agent, and Dr. R. E. Baker, University of California, at Davis, are conducting strawberry variety tests in Los Angeles county. If only one of the ten varieties being tested proves satisfactory it may replace Klondike, which was extensively grown before the war, and put the county back in the strawberry-growing business.

W. B. B.

CORRECTION.

In the column "California Notes" in the November 15 issue there appeared a news item incorrectly stating that the Saratoga Camellia Nursery had moved to a new location on the San Jose-Los Gatos highway and would cater to a retail as well as a wholesale business. E. Gilligan, proprietor, wishes the trade to know that the Saratoga Camellia Nursery, Saratoga, Calif., is still located on the Saratoga-Sunnyvale highway, where it has always been and plans to remain, and has always done both a wholesale and retail business. It is an entirely different firm which has moved to the other highway.

NORTHWEST NOTES.

A special feature of the recent chrysanthemum show at Seattle, Wash., was the display of flowers from many foreign countries. Sponsored by the Seattle Chrysanthemum Society and the Evergreen Chrysanthemum Association, the show was entitled the International Peace Show. Chrysanthemums were flown by airplanes from five foreign countries. Included in the display were flowers from the Danish Chrysanthemum Society, Vanlose, Copenhagen, Denmark; the Tokyo Chamber of Commerce, representing the Japanese government; the H. Woolman Nurseries, Birmingham, England; the Victoria Chrysanthemum Society, New Westminster, B. C., and growers at Shanghai, China.

Bristol Nurseries, Inc., Bristol, Conn., sent flowers from New England, while flowers from several commercial growers and nurseries in northwestern Washington helped to create additional international atmosphere. The center of the floor in the Civic Auditorium, where the show was staged, featured an exhibit by Bonnell Nurseries, Renton, Wash. This exhibit included a number of landscape scenes in which chrysanthemum plants were used. Malmo

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immediate and spring shipment.

Apple
Pear
Sweet and Sour Cherry
Plum
Quince

All above, 1 and 2-year.

Peach and Apricot, 1-yr.
Black Walnut, 3 to 4 and 4 to 5 ft.
Spiraea Vanhouttei, 18 to 24 ins.,
2 to 3 ft. and 3 to 4 ft.

Send for our latest wholesale list.
Your surplus list would be appreciated.

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Cardinal
THE SENSATIONAL NEW
**EARLY DARK RED
Grape**

AND 32 OTHER LEADING VARIETIES.
ALL GRAPE VINES CERTIFIED & SEALED

Kim Elberta
THE OUTSTANDING
EARLY ELBERTA
Peach

AND 135 OTHER VARIETIES OF
FRUIT & NUT TREES, ON STANDARD
& RESISTANT ROOT STOCKS
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FRUIT and NUT TREES

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California Grown Liners

Well rooted stock in 2 1/4" pots. Over 200 varieties ready for shipment. All prices F.O.B. Monrovia. Minimum quantity 25 per variety.

	EACH
Amygdalus alba nana	12c
Bouvardia Albatross	15c
Cedrus deodara	15c
Chamaecyparis Law. Allumi	15c
Gardenia veitchi	15c
Weigela rosea var.	12c
Magnolia grandiflora	15c
Syringa persica	12c
Jasminum primulinum	12c
Photinia serrulata nova	12c

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Season's Greetings

Our Wish for You

A CHRISTMAS GAY WITH JOY AND GLADNESS

A NEW YEAR BRIGHT WITH THE PROMISE OF
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Nurseries & Seed Stores, Seattle, Wash., featured other groups of landscape materials on the stage. Another group of landscape shrub material was provided by Strander Evergreen Nurseries, Seattle. Commercial exhibits showing cut flowers of many varieties of chrysanthemums were shown by Leighton Gardens, Stidham Gardens, Mrs. E. W. Zachau, West C. Nelson and Maple Leaf Floral Gardens. An exhibit of small greenhouses and coldframes made of aluminum was shown by Stoen's Rock & Landscape Co.

Richard White, executive secretary of the American Association of Nurserymen, and Ray Hartman, San Jose, Calif., A. A. N. executive committee member, spoke at the September meeting of Washington state A. A. N. chapter 28. About forty-one persons from over the state and a visitor from Live Oak, Calif., Jerry Vistica, attended the dinner meeting to hear the guest speakers.

Ray Adams and Robert Tindall, delegates to the 1948 A. A. N. convention, made their reports. No election of officers was held; so the present officers are to preside for another year. Further business of the evening included the welcoming of new members, Mr. Moritsen, Kent Nurseries, Kent, and W. M. Steward, Maple Valley. Community singing was led by R. R. Williams, Puget Sound Nursery & Garden Shop, Tacoma, accompanied at the piano by Mrs. Jean Malmo, Malmo Nurseries & Seed Stores, Seattle.

Corsages were presented to two new brides. One went to Mrs. Ray Adams, wife of the operator of Richmond Beach Nurseries, Richmond Beach, and the other to Mrs. John B. Strander. She is the former Louise Murray, Pleasantville, N. Y., and is a graduate of Cornell University. Mr. Strander recently received his degree in landscape architecture from Cornell University, Ithaca, N. Y., and is now engaged in operating Strander Evergreen Nurseries with his father, John S. Strander.

George Eade, formerly with the barberry eradication service, Spokane, was recently appointed chief nursery inspector for the state of Washington. Mr. Eade replaces Henry Williamson, who resigned to take care of business interests in Arizona. C. W.

ROTARY drilling equipment, similar to that used on oil wells, is being used to speed the drilling of a new well for water at Del Rancho Fortuna, McFarland, Calif. Total cost of the improvement will be over \$18,500.

NURSERY DISPLAY AIDS CHARITY.

In addition to placing in the hands of Arizona gardeners over 10,000 planting guides and other information on the planting of plants, the Norman Nursery & Flower Shop, Phoenix, Ariz., were unexpectedly able to aid a good cause with their exhibit at the Arizona state fair last month. What started out to be only a display depicting a corner garden with an old-fashioned stone well and a pool at the base ended as a wishing well for crippled children. Much to the exhibitor's surprise, visitors at the fair started throwing coins into the well and pool on the first day of the fair.

Realizing that this would be an ideal way in which to aid some charitable organization, the nursery placed a sign beside the pool and well stating that the money would be used in some way to benefit the crippled children's home. When the fair had ended, a total of \$337.07 was taken from the well and pool.

Through the cooperation of the Phoenix junior chamber of commerce, a motion-picture projector and several films were purchased to provide entertainment for the shut-in crippled children. Much local publicity was given the display, and for next year's fair the Norman Nursery & Flower Shop hope to work out a display to collect more money for charitable uses.

NEW METHOD FOR 2,4-D BARBERRY ERADICATION.

A solution of 2,4-D applied to freshly cut barberry stems has been found to cause a complete kill of barberry bushes and at the same time is a more economical and effective method of eradication than grubbing.

When 2,4-D proved deadly to so many kinds of plants, the barberry eradicators of the United States Department of Agriculture bureau of entomology and plant quarantine hoped to be able to use the chemical as a quick and economical killer of the shrubs, but first tests did not prove reliable. Shrubs were defoliated but not always killed, and vigorous next season growth was frequent.

As a result of experiments in the Pacific northwest, a new kind of attack with 2,4-D has been developed. The barberry canes are cut close to the ground with pruning shears and the freshly cut stubs are covered with a strong solution of 2,4-D, stronger than is used in weed killing in lawns or grain fields, which causes a complete kill. It is possible that this meth-

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Paul E. Van Allen

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We Extend our Best Wishes
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MERRY CHRISTMAS
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HAPPY NEW YEAR

Quality Stock

CONIFERS AND BROAD-LEAVED
EVERGREENS
SHADE AND FLOWERING TREES
FRUIT TREE SEEDLINGS
FRUIT TREES
DECIDUOUS SHRUBS
VINES AND BULBS
PORTLAND ROSES
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GOOD WESTERN-GROWN NURSERY STOCK

Fruit Tree Seedlings
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Grown right and packed right.
Combination carloads to Eastern
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Flowering, Ornamental and
Shade Trees

Oregon and Washington-grown
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Rooted Cuttings

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1-yr., field-grown seedlings, row run,
\$30.00 per 1000; \$4.00 per 100.

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MOUNT VERNON, WASH.

ROSES—TREE ROSES.

Reservations made for 1948-49 season.
Good varieties—excellent quality. Write
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Growers of Oregon Roses for 23 years.
200 varieties to select from, at the best
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Wholesale only

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Two-year-old, field-grown plants.
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YAKIMA VALLEY - GROWN SEEDLINGS

None grown finer than these fine, fibrous, well rooted and well graded seedlings.

	Apple	Pear
	Per 1000	Per 1000
1/4-in. and up, br.....	\$30.00	\$32.00
1/4-in. and up, str.....	28.00	28.00
No. 1, 3/16 to 1/4-in., br.	25.00	28.00
No. 1, 3/16 to 1/4-in., str.	25.00	
No. 1, 3/16 to 5/16-in., str.	25.00	
No. 2, 2/16 to 3/16-in., br.	18.00	18.00
No. 2, 2/16 to 3/16-in., str.	18.00	18.00
No. 3, about 2/16-in.	12.00	14.00
No. 1, liner or stub.	18.00	
Chinese Elm, seedlings, Per 1000		
12 to 18 ins.	\$15.00	
18 to 24 ins.	20.00	
2 to 3 ft.	30.00	
3 to 4 ft.	50.00	



WASHINGTON NURSERIES
TOPPENISH, WASH.

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Grown in sandy-loam field beds in full sun.

Chamaecyparis laws, ellwoodi, 4 to 6 ins., \$10.00 per 1000.....	\$12.00
Juniperus chin. pfitzeriana glauca hetzi	15.00
Juniperus comm. fastigiata.....	12.00
Thuja occ. woodwardi.....	12.00

ROOTED CUTTINGS

Juniperus comm. fastigiata, average, 5 to 8 ins.	\$ 8.00
Thuja occ. aureo-variegata.....	8.00
Thuja occ. pyramidalis, average 4 to 6 ins.	8.00
Thuja occ. pyramidalis, average 5 to 8 ins., strong.....	10.00

Write for complete descriptive price list of more than 125 varieties of Azaleas, Conifers, Heathers, etc. Available in rooted cuttings and field transplants.

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Evergreen Liners
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Pioneer seedling growers on the Pacific Coast since 1914.

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We aim to please
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PRONOUNCING DICTIONARY of Plant Names

64 pages, 3000 names, 25¢ per copy
American Nurseryman Chicago

of applying 2,4-D may be modified for use against other shrubby pests, such as poison oak and poison ivy.

ACID PREVENTS ROSES' SPROUTING IN STORAGE.

The sprouting of rosebushes in storage has been prevented by the use of a sprout inhibitor chemical, methyl ester of alpha-naphthaleneacetic acid, in various concentrations, carriers and storage temperatures, according to a report in a recent news-letter of the Iowa Nurserymen's Association of an experiment carried on by Arnold H. Webster, department of horticulture, Iowa State College, Ames.

A total of 200 dormant Mrs. P. S. du Pont rosebushes was used in the experiment. The groups for treatment were: A control group to which no treatment was given; a group of rosebushes dusted with one part of the sprout inhibitor in 1,000 parts of talc; rosebushes vapor-treated with .3 gram of the sprout inhibitor per 1,000 cubic feet at 70 degrees Fahrenheit for sixteen hours; a group treated with Dowax spray with .01 per cent sprout inhibitor, and another group treated with Dowax spray at .005 concentration. After treatment, the rosebushes were stored at 36 degrees Fahrenheit in common storage, at 37 degrees and 44 degrees in refrigerated storage and at 50 degrees in thermostatically controlled, above-ground insulated storage.

The treated rosebushes were set out in May, and records taken at that time showed complete inhibition of sprouting on all bushes put in refrigerated storage at 44 degrees and at 37 degrees. Inhibition was complete with the dust treatment under common storage. The other inhibitor treatments in common storage allowed moderate sprouting. But in the 50-degree storage sprouting was greater, with the dust treatment showing a marked retarding effect compared with the treatments.

The conclusions reached from the experiment were that methyl ester of alpha-naphthaleneacetic acid could completely inhibit sprouting in rosebushes, and that dust was the best carrier, since vapor and spray carriers allowed moderate sprouting. The range of concentrations used in all the carriers was found to be effective, and lower temperatures inhibited sprouting better than higher ones. However, higher quality of bloom or foliage or a significant increase in total number of blooms did not necessarily result from the use of the sprout inhibitor.

OREGON'S BEST SOURCE OF GOOD ROSES

A complete list of HYBRID TEAS, CLIMBERS, BABIES and FLORIBUNDAS. Also, one of the most complete lists of patent varieties, including the A.-A. R. S. award winners.

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and a general assortment of other nursery stock.

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Hillsboro, Oregon

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* When packing bare roots or deciduous stock for shipment or storage, use Wood Feathers brand cedar shavings (red cedar shingle tow). There are 3 reasons for Wood Feathers' superiority:

1. Large moisture-absorbing capacity.
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ROSE REGISTRATIONS.

The registration of rose varieties to prevent duplication and close similarity in variety names has now assumed international importance. Through the combined efforts of the American Rose Society and the National Rose Society of Great Britain a system is now in operation whereby the registration of a variety name in either country constitutes its registration in the other. An expansion of the program is being considered to include France and Australia and possibly other important rose-producing countries. New Zealand may also accept the plan.

The following rose varieties have been registered recently with the American Rose Society and the National Rose Society, London, England. (Variety is followed by classification, then introducer.) Anyone contemplating the introduction of a new rose should contact the American Rose Society, Harrisburg, Pa., for registration forms.

Alain, HPol., Wheatcroft Bros.; Allure, HT., Interstate Nurseries, Inc.; Audrey Cobden, HT., Fryers Nurseries, Ltd.; Babe Ruth, HT., Howard & Smith; Beryl Formby, HT., Fryers Nurseries, Ltd.; Bridget, HT., R. Tucker & Sons; C. A. Fletcher, HT., R. Tucker & Sons; Capistrano, HT., Germann's, Inc.; Carol Lewis, HT. (Introducer not given); Charles Mallerin, HT., Wheatcroft Bros.; Chelsea, HT., E. B. LeGrice; Citronella, HPol., G. Longley & Sons; Cl. Southport, CHT., Howard Rose Co.; Crimson Masse, HPol., G. Longley & Sons; Denny Boy, HPol., Marsh's Nursery; De Ruiter's Herald, HPol., C. Gregory & Son, Ltd.; Desert Song, HT., R. Tucker & Sons; Egalite, HPol., G. Longley & Sons, and Fandango, HT., Armstrong Nurseries.

Fraternite, HPol., G. Longley & Sons; Formby Favourite, HT., R. Wright; Gaudin, HPol., G. Longley & Sons; Halsha, HT., Wheatcroft Bros.; Ida McCracken, HT., R. Harkness & Co.; Indian Maid, HT. (Introducer not given); Juno, HT., Armstrong Nurseries; Kolibre, HPol., G. Longley & Sons; Lady Belper, HT., C. Gregory & Son, Ltd.; Marcelle Gret, HT., Wheatcroft Bros.; Mendel, HPol., G. Longley & Sons; Meryl Jane Gaskin, HT., Fryers Nurseries, Ltd.; Michele Melland, HT., Wheatcroft Bros.; Mission Bella, HT., Germann's, Inc., and Mother of Pearl, HPol., E. B. LeGrice.

Mrs. H. Cobden Turner, HT., Fryers Nurseries, Inc.; Mrs. Oliver Mee, HT., Fryers Nurseries, Inc.; Norah Longley, HPol., G. Longley & Sons; Patricia Watkins, HPol., Watkins Roses; Percy, G. Longley & Sons; Red Ember, HT., F. Cant & Co., Ltd.; Renae, Cl. Pol., Armstrong Nurseries; Sentry, HT., R. Tucker & Sons; Sultane, HT., Wheatcroft Bros.; Sun Up, HT., the Brownells; Tahiti, HT., Wheatcroft Bros.; Temptress, HT., Joseph H. Hill Co.; Tom Breneman, HT., Howard & Smith; Vanessa, HT., G. Longley & Sons; Vesta, G. Longley & Sons; Virgo, HT., Wheatcroft Bros.; Viscount Southwood, HT., R. Harkness; Vuurbaak, HPol., G. Longley & Sons; Wendelen, HPol., G. Longley & Sons; White Pearl, HT., C. H. Totty Co.; Wilfred Pickles, HT., Fryers Nurseries, Inc., and William Harvey, HT., R. Harkness & Co.

DAY LILY GROUP ELECTS.

New officers of the Hemerocallis Society are George E. Lenington, Kansas City, Mo., president; the Rev. Edwin C. Munson, Rock Island, Ill., vice-president; Mrs. Pearl Sherwood, Atlantic, Ia., secretary-treasurer, and F. E. Rice, Bartlesville, Okla.; Harold W. Knowlton, Auburndale, Mass., and J. P. Wood, Yakima, Wash., regional directors. They were elected at a meeting of the society, held at Shenandoah, Ia.



HEMLOCKS for LINING-OUT

CANADA HEMLOCK

	Per 100	Per 1000
6 to 12 inches, twice transplanted, (field-grown).....	\$18.00	\$144.00
12 to 18 inches, twice transplanted, (field-grown).....	22.00	176.00
18 to 24 inches, twice transplanted, (field-grown).....	28.00	224.00

Tsuga canadensis (Canada Hemlock)

Native to New Brunswick, to Wisconsin and south to Alabama. A well known conifer of graceful, pleasing habit of growth, and regarded by some landscape architects as one of the best of conifers. Perfectly hardy, withstanding low temperature without injury to tree or foliage. Foliage is heavy and attractive, needles are short. Tree is naturally broadly pyramidal in form but can be grown to a rounded head, and lends itself well to pruning into hedges.

WESTERN HEMLOCK

	Per 100	Per 1000
6 to 12 inches, once transplanted.....	\$11.00	\$ 88.00
12 to 18 inches, once transplanted.....	18.00	144.00
18 to 24 inches, once transplanted.....	24.00	192.00

Tsuga heterophylla (Western Hemlock)

The Western Hemlock is very similar to Tsuga canadensis. It grows to about the same form and height and has the same characteristically graceful branch tips. The foliage is slightly heavier with a beautiful luster. It is common in the Coast and Cascade ranges of western United States. Hardy. Like canadensis it has splendid ornamental values.

The hemlocks have been described by some writers as some of the most lovely and graceful of conifers. These qualities, taken with the facts that they are hardy and easy to transplant, make them most desirable. Our stock this year is of outstanding quality—fine tops and very heavy roots.

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We Carry a Full Line of Evergreens.
Write today for 1949 Wholesale List.
(Use letterhead or license number)Largest Growers of Camellias
in Northern California.

Clean healthy stock, can ship everywhere, all container-grown, 1, 4 and 5-gallon cans, 4-gallon, 12-inch redwood tubs, and 14-inch redwood tubs. Send for list of over 150 varieties.

Special price on carlots, over 40,000 plants.

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CAMELLIAS

Over 350 Varieties.
Specimen plants, all sizes,
lots of bloom buds.

RHODODENDRONS

Fancy and grafted varieties.

AZALEAS

Finest of stock.

ALSO

Evergreen lining-out stock.

Write for price list.

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PORTLAND 12, ORE.ROSES
FRUIT TREES
SMALL FRUITS
GLADIOLI
REGAL LILIES
SHRUBS

Send for our price list.

MOUNTAIN VIEW FLORAL NURSERIES
Route 2, Box 384 TROUTDALE, ORE.BEST WISHES FOR A
MERRY
CHRISTMAS
and a
HAPPY
NEW YEAR

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215 Orcas St., SEATTLE 8, WASH.
Tool Makers Since 1920

CLASSIFIED ADS

25 cents per line.

Minimum order, \$2.00.

AZALEAS

AZALEAS.

Thousands of beautiful, well budded, excellent color, field-grown Kurumes, Coral Bells, Hinodegiri, Pink Pearl, Salmon Beauty, Snow, Easy trucking distance to New York and other eastern points, but we ship anywhere. Satisfied customers in 12 states.

	Each	Each
	per 100	per 1000
4 to 6 ins.	.....\$0.45	\$0.40
6 to 8 ins.	......70	.65
8 to 10 ins.	......90	.85
10 to 12 ins.	.....1.15	1.00

Packing additional. Burlapping 10c each extra, 25c at 1000 rate. Order today while they last.

TANKARD NURSERIES
Emmore, Va.

AZALEAS.

LINING-OUT STOCK.

Grown in cool houses through the winter. Plants pinched back, will have 3, 4 and 5 shoots and a vigorous root system with a good ball of peat. Can be lined out directly into open ground.

	KURUME
Atlanta	Hinodegiri
Carmen	Pink Pearl
Fedora	Snow
Ledifolia alba	\$150.00 per 1000

New looking orders for April 1, 1949, shipment onwards. Place your order early.

KOSTER NURSERY
Bridgeton, N. J.

AZALEAS and RHODODENDRONS.

Heavy-rooted, twice-transplanted, shipped with natural peat ball.

	Per 100
Azalea mollis, 5 to 7 ins.	.....\$18.00
Azalea mollis, 10 to 12 ins.30.00
Azalea kaempferi, 5 to 7 ins.18.00
Azalea kaempferi, 8 to 12 ins.30.00
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Rhododendron hybrid, 2 to 4 ins.20.00
Rhododendron hybrid, 6 to 10 ins.40.00

No charge for packing, F.O.B. Geneva, Ohio.

Send for list of L.O. stock.
GIRARD BROS. NURSERY
Geneva, Ohio

HARDY AZALEA LINERS.

Kaempferi—Fedora (large deep rose-pink), Carmen (rose-pink), Louise (carmine), Mme. Butterfly (light lavender-shaded pink), Atlanta (lavender). Also, Hinodegiri (red), Ledifolia alba (white). Well branched, 2-yr. twice transplanted, 6 to 8 ins., \$55.00 per 100. Grown in special mixture producing lightweight ball and large root system. Spring delivery. No packing charge. Cash with order.

GREENSTOCK NURSERY
(Route 112, between Station and Coram)
Port Jefferson Station, L. I., N. Y.

AZALEA TRANSPLANTS.

Hinodegiri, Snow, Hinomayo, Ledifolia alba, rosea, Pink Pearl, Coral Bells, Magnifica, Amoena. Mixed transplants from choice collections, including the above and others. Mixed Kaempferi hybrids. Ready in April, 1949. Shipping charges to be paid by buyer. Packing free, \$13.00 per 100.

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AZALEAS for forcing or growing on, 1-yr., 4-in., 20c ea. Hinodegiri, Coral Bells, Pink Pearl, Sweetheart Supreme and Orange Coral Bells. Rooted cuttings, \$6.00 per 100, \$50.00 per 1000.

JOHN WIGMORE
Norman Ave. Riverside, N. J.

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OREGON-GROWN SMALL FRUIT PLANTS.

	Per 1000
Marshall Strawberry\$12.00
Banner Strawberry13.00
Corvallis Strawberry	.....13.00
Rockhill Everbearing Strawberry	.....50.00
Perfection Currant, 2-yr., No. 1115.00
1-yr., No. 1100.00
Oregon Champion Gooseberry,115.00
2-yr., No. 1100.00
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Prices F.O.B. Silvertown. No packing charge.
ABUQUA GARDENS
Rt. 2, Box 159 Silvertown, Ore.

CERTIFIED STRAWBERRY PLANTS

Grown on new land. Excellent roots. Each bunch labeled when requested. F.O.B. here. Blakemore, Klommore, Klondike, \$5.00 per 1000. Tenn. Beauty, Tenn. Shipper, Premier, \$8.00 per 1000. Gem, \$10.00 per 1000. Streamliner, \$15.00 per 1000.

ROMINES PLANT FARM Dayton, Tenn.

Doubly inspected planting stock, free from Red Stele. New Superfection Everbearing Strawberry, \$40.00 per 1000. New Minnesota No. 1118, hardy June bearer named Arrowhead, \$14.00 per 1000. Also a complete line of standard strawberries: Concord, Fredonia, Caco, Moore Early Grapes, heavy, 1-yr., No. 1, \$6.00 per 100, 2-yr., \$8.00 per 100. Quality Iowa-grown Gladiolus bulbs, new ground-grown, hand cleaned and sorted, No. 1, \$20.00 per 1000, No. 2, \$15.00 per 1000, No. 3, \$12.00 per 1000, 100 at 1000 rate. No charge for packing on above stock. Varieties of gladiolus available: Picardy, Token, Gardenia, Vagabond Prince, King Lear, Margaret Fulton, Gold Eagle. Would exchange any of above stock for 5000 Cumberland, Morrison or Logan Raspberry.

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PIXWELL and SCHWAB GOOSEBERRIES.

LATHAM and CHIEF RASPBERRIES.

Pixelwell Gooseberries, leading variety, 2-yr., light, \$12.00 per 100. Schwab Gooseberries, new seedling, world's largest gooseberry, berries often 1½ ins. in diameter, highest quality, hardy, very productive, 1-yr., heavy, \$6.50 per 10; 1-yr., light, \$5.50 per 10. All raspberries, No. 1, heavy, \$4.00 per 1000. 10 per cent discount for cash on all stock. All prices wholesale. All plants that die, replaced at ¼ price.

SCHWAB FRUIT FARM & NURSERY
220 N. Fifth St. Mankato, Minn.

Rockhill Strawberry plants (everbearing), \$5.50 per 100.

\$47.50 per 1000.

Willamette Raspberry plants, \$4.50 per 100.

\$40.00 per 1000.

New Washington Raspberry plants, \$25.00 per 1000.

All No. 1 stock raised under overhead irrigation in Central Oregon, F.O.B. John Day.
GRANT COUNTY MARKET GARDENS
Box 162 John Day, Ore.

GEM EVERBEARING STRAWBERRY PLANTS.

Guaranteed true to name and free of mixed varieties. Choice northern-grown, No. 1 plants. Booking orders now for spring delivery, \$10.00 per 1000, F.O.B. Prepared to fill mail orders on these and other varieties using your tags, etc. Write for details.

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SPECIAL OFFERING.

100,000 big, scarlet Gem Everbearing Strawberry plants, \$15.00 per 1000. Bruner Marvel, \$18.00 per 1000. Remember these are northern-grown under irrigation.

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200,000 LATHAM RASPBERRY PLANTS.

No. 1 suckers, \$30.00 per 1000.
1-year transplants, 40.00
2-year transplants, 50.00
C. H. BENEDICT Grand Junction, Mich.

STRAWBERRY PLANTS—Superfection, Streamliner, Ben Evermore, Danlap, Blakemore, Premier, Beaver and Arrowhead. Nationally known for good plants.
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HARDY LILY BULBS.

(From U. S.-occupied Japan.)
Lilium rubrum, 7 to 9-in. up to 11 to 13-in.
Lilium auratum, 7 to 9-in. up to 11 to 13-in.
Lilium aur. platyphyllum, 8 to 9-in. up to 11 to 13-in.

Write for new low prices—specifying quantities. December delivery and later.

BERKERY, Inc. New York 7, N. Y.

LILY BULBS.

Hardy northern-grown Lily bulbs. New, rare, scarce and unusual as well as standard varieties. New wholesale list now ready. Send for your free copy.

J. HENDRIKS, Grower Portage, Mich.

HOLLAND-GROWN BULBS.

HYACINTHS, 16 to 17 cm., \$12.00 per 100. Gertrude (pink), Blamarck (blue).
CROCUS, 8 to 9 cm., \$2.00 per 100. Yellow, blue and striped.

BENTON COUNTY NURSERY CO., Inc. Rogers, Ark.

PRIZE-WINNING TUBEROUS BEGONIA BULBS

from Antonelli's of Santa Cruz, Calif. See HELEN YEARSLEY at the Ohio, Illinois and Michigan meetings for prices and slides, or write the company direct.

CAMELLIAS

SPECIAL SALE ON CAMELLIAS.

500,000 not grown in hotbeds.
6 to 10 ins., 24c each, 12 to 15 ins., 40c each, 15 to 20 ins., 50c each.

Bonnie Bee, Brilliant, Brown's Red, Chandleri Elegans, Cameo Pink, Countess of Orkney, Dark Cheerful, Dixie, Jarvis Red, Lady Campbell, Monarch, Old Rose, Otome, Pope Plus, Prof. Sargent, Reine des Fleurs, Rose Emory, Semidouble Blush.

Sarah Frost, 16 to 15 ins., \$20.00 per 100; 18 to 24 ins., \$25.00 per 100.

Check with orders.
NATIONAL NURSERIES Biloxi, Miss.

NEW AND RARE CAMELLIAS.

Shipped in Gallon Containers.

WE PAY THE EXPRESS.

Safe Delivery and Satisfaction Guaranteed. We will pay the express on orders for 12 or more plants when ordered at one time, in multiples of 4 plants, the number our shipping cases were designed to accommodate. Probably never again such values for so LOW A DELIVERED PRICE. Some of the plants of the varieties marked (*) are budded and will be shipped on first orders while they last.

GROUP "A." \$2.75 each, delivered** 18 to 20 inches.

*Col. Firey, red *Pope Plus, red

*Otome, var. *Mar. of Exeter, pink

*Admiration, var. *Vedrine, red

GROUP "B." \$3.75, each, delivered** 18 to 30 inches.

Purple Emperor, red *Gigantea, var.

Casablanca, pink *Lotus, white

Finlandia, white *Pr. Nagasaki, var.

Finlandia, var. *Yours Truly, pink

Finlandia, new red *Lady Clare, pink

Salmon Queen, pink *King Lear, var.

Freeland, red *Magnoliaceflora, pink

Marian Mitchell, red *Daikagura, var.

Eleanor Hagood, pink *Daikagura, red

Mme. Simons, white *Crown Jewels, red

Perfection Red, red *Mrs. K. Sawada

(pat.), pink

GROUP "C." \$4.75 each, delivered** 24 to 36 inches

Paul Howard, white *Lady Hume Blush, pk.

*Casablanca, pink *Rev. J. Bennett, pink

*Purple Emperor, red *Mrs. Chas. Cobb, red

*King Lear, var. *La Reine, var.

*Alba Plena, white *Marg. Hicdon, pink

*Fimbriata, white *Fringed Dainty, var.

*Finlandia, white *Pax, new white

Sept. Morn, new *Mary Charlotte, new

white

SPECIAL NEW CAMELLIA HIGH HAT.

(Flesh-pink Daikagura)

The most important camellia introduction in a decade. The red and variegated Daikaguras have been among the earliest and most profitable, with blooming season from early October through February—and now a Daikagura of a lighter shade than Pink Perfection, for foliage, lasting quality of blossoms, on or off the plant, for dependability for holiday season bloom. The Daikaguras are the leaders.

1-yr. grafts 1-yr. grafts

15 to 18 ins. \$5.00 \$5.00

18 to 24 ins. 6.50 7.50

24 to 30 ins. 7.50 8.50

Some varieties shown are in very short supply; order early for best selection and name some second choices, if convenient, in case we are sold out of something that was in your order.

Wholesale Growers and Shippers of Camellias Exclusively.

For 15 Years the Best from the Far West.

TORMEY'S, TEMPLE CITY, CALIF.

CAMELLIA CUTTINGS.

From one and one-half cents (1½c) up.

Write for price list.

SUNNY KNOLL NURSERY, Dept. A.

Route 2, Box 182 Mobile, Ala.

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LINING-OUT STOCK.

EVERGREENS, pot size Per 100

Taxus capitata (from cuttings) 2½-in. \$25.00

Taxus cuspidata 2½-in. 22.50

Taxus hicksii 2½-in. 25.00

Thuja pyramidalis 2½-in. 20.00

Thuja pyramidalis, imp. 2½-in. 20.00

Thuja woodwardii 2½-in. 17.50

SHRUBS.

Beauty Bush (Kolkwitzia) Pot size Per 100

ambalisii 2-in. \$16.00

Deutzia gracilis 2-in. 10.00

Euonymus carrierei 2½-in. 12.50

Euonymus radicans erecta 2½-in. 12.50

Euonymus vegetus 2½-in. 17.50

Foraythia Spring Glory 2½-in. 16.00

Philadelphus aurea 2½-in. 15.00

2 per cent discount for cash with order, packing without cost.

THE HOLLANDIA GARDENS

South Vienna, Ohio

LINING-OUT STOCK.

Priced per 100.

4 to 6 6 to 8 8 to 12

ins. ins. ins.

Buxus harlandi \$8.00 \$10.00 \$12.50

Buxus japonica 8.00 10.00 12.50

Feljoa sellowiana 10.00 12.50

(Pineapple Guava)

Gardenia fortunei 6.00 7.50 10.00

Gardenia Mystery 6.00 7.50 10.00

Gardenia radicans 6.00 7.50 10.00

Gardenia veitchii, rooted cuttings 5.00

Ilex crenata bullata 8.00 10.00 12.50

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Write for our new illustrated catalog.

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Wholesale Only.

PFITZER JUNIPER.

Large landscape-size plants. Compact and symmetrical. Every one a specimen. 2½ to 4-foot spread; \$55.00 per 10 \$500.00 per 100.

THE WILLIS NURSERY CO.

Ottawa, Kan.

LINING-OUT STOCK.

Ready for immediate shipment or for spring, 1949, delivery. Cash with order, or 25 per cent cash on advance orders, except in instances where customer has established credit on our books.

	Each per 1000
* <i>Biota aurea nana</i> , 2 1/2-in. pots.....	\$0.20
* <i>Biota aurea nana</i> , 2 1/2-in. pots.....	.22 1/2
* <i>Biota aurea pyra</i> , compacta, 2 1/2-in. pots.....	.18
2 1/2-in. pots.....	.20
<i>Biota bonita</i> , 3 to 4 ins., liners.....	.10
4 to 6 ins., liners.....	.12
2 1/2-in. pots.....	.18
2 1/2-in. pots.....	.20
<i>Biota bakeri</i> , 3 to 4 ins., liners.....	.10
4 to 6 ins., liners.....	.12
2 1/2-in. pots.....	.18
2 1/2-in. pots.....	.20
<i>Biota excelsa</i> , 2 1/2-in. pots.....	.20
<i>Biota sibylli</i> , 2 1/2-in. pots.....	.18
<i>Biota sibylli</i> , 2 1/2-in. pots.....	.20
<i>Cedrus deodara</i> , 4 to 6 ins., liners.....	.07 1/2
6 to 8 ins., liners, partly branched.....	.12
8 to 10 ins., liners, mostly branched.....	.12
2 1/2-in. pots.....	.15
2 1/2-in. pots.....	.18
<i>Cypress</i> , Blue Lawson, 2 1/2-in. pots.....	.20
<i>Juniperus chinensis</i> pfitzeriana and <i>Juniperus chin.</i> pfitzeriana compacta, 3 to 4 ins., liners.....	.10
4 to 6 ins., liners.....	.12
6 to 8 ins., liners.....	.15
2 1/2-in. pots.....	.18
2 1/2-in. pots.....	.20
<i>Jun. chin. sylvatica</i> , 2 1/2-in. pots.....	.25
<i>Jun. com. ashfordi</i> , 8 to 12 ins., field-grown.....	.20

<i>Jun. vlr. keteleeri</i> , 2 1/2-in. pots.....	.17 1/2
<i>Taxus cuspidata</i> , 3 to 4 ins., liners.....	.08
<i>Taxus cuspidata</i> , 4 to 6 ins., liners.....	.10
* <i>Taxus cuspidata</i> , 2 1/2-in. pots.....	.15
* <i>Taxus cuspidata</i> , 2 1/2-in. pots.....	.18
* <i>Abelia Edward Goucher</i> , 2 1/2-in. pots.....	.12
* <i>Abelia grandiflora</i> , 2 1/2-in. pots.....	.10
* <i>Berberis argentea</i> , 2 1/2-in. pots.....	.12
* <i>Berberis argentea</i> , 2 1/2-in. pots.....	.15
<i>Buxus japonica</i> and <i>sempervirens</i> 2 to 4 ins., liners.....	.06
4 to 6 ins., liners.....	.07 1/2
<i>Buxus handsworthii</i> , 3 to 4 ins., liners.....	.05
<i>Camellia sasanqua</i> , 2 1/2-in. pots.....	.15
<i>Camellia sasanqua</i> , 2 1/2-in. pots.....	.18
<i>Elaeagnus pun. aurea</i> variegata, 4 to 6 ins., liners.....	.12
<i>Elaeagnus pun. fruticulosa</i> , 3 to 4 ins., liners.....	.08
4 to 6 ins., liners.....	.10
2 1/2-in. pots.....	.12
2 1/2-in. pots.....	.15
<i>Eucynthus patens</i> seiboldianus, 4 to 6 ins., liners.....	.08
6 to 8 ins., liners.....	.10
<i>Gardenia fortunei</i> , 4 to 6 ins., liners.....	.08
6 to 8 ins., liners.....	.07 1/2
2 1/2-in. pots.....	.12
2 1/2-in. pots.....	.15
<i>Hex crenata</i> , 2 1/2-in. pots.....	.15
<i>Hex crenata rotundifolia</i> , 2 1/2-in. pots.....	.15
<i>Hex crenata rotundifolia</i> , 2 1/2-in. pots.....	.18
<i>Ligustrum ionandrum</i> , 6 to 8 ins., liners.....	.10
8 to 12 ins., liners.....	.12
<i>Ligustrum lucidum</i> com., 6 to 8 ins., liners.....	.05
6 to 8 ins., liners.....	.08
2 1/2-in. pots.....	.12
<i>Magnolia grandiflora</i> , 2 1/2-in. pots.....	.12
<i>Magnolia grandiflora</i> , 2 1/2-in. pots.....	.15
<i>Nandina domestica</i> , 2 1/2-in. pots.....	.10
<i>Nandina domestica</i> , 2 1/2-in. pots.....	.12
* <i>Pyracantha lalandi</i> , 2 1/2-in. pots.....	.12
* <i>Pyracantha yunnanensis</i> , 2 1/2-in. pots.....	.12
<i>Virburnum tinus</i> , 6 to 8 ins., liners.....	.08
<i>Virburnum tinus</i> , 8 to 12 ins., liners.....	.10
<i>Magnolia salicifolia</i> nana, 2 1/2-in. pots.....	.35
Pink-flowering Almond, 4 to 6 ins., liners.....	.06
2 1/2-in. pots.....	.10
*2 1/2-in. pots.....	.12

SPECIAL NOTICE: Items marked by asterisk (*) available only for spring, 1949, delivery. All items not so marked can be delivered now or later. All prices on potted liners include shipment in new Red Neponset paper pots.

T. G. OWEN & SON, Inc.
Columbus, Miss.

PICEA PUNGENS GLAUC.			
20,000 XXX, 8 years from seeds. F.O.B. nursery. B&B or C.S. pots. Incl. packing.			
Selected Blues	Red Run		
Lots of Lots of Lots of Lots of			
Sizes	100	100	100
12 to 15 ins.....	\$12.50	\$110.00	\$ 7.50
16 to 18 ins.....	20.00	100.00	10.00
18 to 24 ins.....	20.00	190.00	15.00
Cash with order or before shipment. Bare roots packed in wet moss, deduct 20c per tree. Discount 10 per cent for lots of 1000.			
H. W. WEBER			
Summer St.	Weston 93, Mass.		

SEEDLINGS FOR SPRING.

	Per 1000
Scotch Pine, 2-yr., 3 to 5 ins.....	\$30.00
Austrian Pine, 2-yr., 3 to 5 ins.....	30.00
Norway Spruce, 2-yr., 3 to 12 ins.....	35.00
Red Pine, 2-yr., 2 to 5 ins.....	30.00
Colo. Blue Spruce, 2-yr., 2 to 6 ins.....	35.00
Douglas Fir, 3-yr., 3 to 8 ins.....	40.00
Cash, or 25 per cent deposit with order, balance C.O.D.	

SAM DIBLE NURSERY
Sheloceta, Pa.

EVERGREEN LINING-OUT STOCK

Field-grown TRANSPLANTS	Per 100	Per 1000
Colo. Blue Spruce, 4 to 8 ins., X.....	\$8.00	\$75.00
White Spruce, 4 to 8 ins., X.....	8.00	75.00
Mugho Pine, 3 to 6 ins., X.....	4.00	35.00
Can. Hemlock, 4 to 8 ins., X.....	7.50	60.00
American Arborvitae, 10 to 30 ins., XX.....	20.00	.....

SEEDLINGS	Per 100	Per 1000
American Red Pine, 4 to 8 ins.....	5.00	40.00
American Red Pine, 2 to 4 ins.....	3.50	30.00
Scotch Pine, 3 to 6 ins.....	3.00	25.00
Scotch Pine, 2 to 3 ins.....	2.00	15.00
Mugho Pine, 3 to 6 ins.....	3.00	25.00
Norway Spruce, 2 to 5 ins.....	3.50	30.00

SUNCREST EVERGREEN NURSERIES
P. O. Box 543 Johnstown, Pa.

All plants are extra-heavy and ready for the field.

	Per 100	Per 1000
<i>Taxus media</i> hickoi, 2-yr. T., 6 to 8 ins.....	\$20.00	
3-yr. T.T., 10 to 15 ins.....	35.00	
<i>Taxus cuspidata</i> , 2-yr. T., 6 to 8 ins.....	25.00	
3-yr. T.T., 10 to 12 ins.....	40.00	
<i>Taxus cuspidata</i> , 2-yr. T., 6 to 8 ins.....	30.00	
3-yr. T.T., 10 to 12 ins.....	50.00	
<i>Taxus cuspidata</i> , 2-yr. T., 6 to 8 ins.....	25.00	
<i>Viburnum rhytidophyllum</i> , 2-yr. T., 10 to 15 ins.....	30.00	
<i>Hex crenata</i> convexa, 2 1/2-in. pots, 2-yr., 6 to 8 ins.....	20.00	

STROHL'S NURSERY
1404 N. Anthony Blvd. Port Wayne, Ind.

RUXUS WELTERI.

Only Hardy Northern Tree Boxwood.

	Per 100	Per 1000
6 to 8 ins., for hedging.....	\$3.50	\$30.00
For lining out, once trpl., per 25, \$8.00.....	15.00	
Place your order now, either for prompt shipment or in the spring. 3 per cent discount for cash. 25 per cent deposit will hold your order until spring.		

Ask for our catalog.
WELTER NURSERIES CO., Inc.
Holland, Mich.

GRAFTS

Juniperus cana erecta, herki, glauca and pyramidalis (Dunelm). Others grafted at your request. Juniper grafts on virginiana understock for spring delivery. \$40.00 per 100; \$150.00 per 1000. 250 takes 1000 rate. Terms: Cash with order and free packing, or 25 per cent deposit with order, packing at cost, balance C.O.D.

ARROW WOOD NURSERY

Box 166 Warsaw, Ky.

TWICE-TRANSPLANTED HEMLOCK

	Per 100	Per 1000
Bed-grown plants with good roots.		
6 to 9 inches.....	\$15.00	\$140.00
9 to 12 inches.....	20.00	180.00
Will exchange for other lining-out stock. Send list and number of hemlocks wanted.		
LEROEY WATKINS NURSERY R. R. 3 Owensboro, Ky.		

RHODODENDRON UNDERSTOCKS.

Firm ball, stock plants, thrice trans. 4 to 6 ins., \$25.00 per 100. 6 to 8 ins., \$35.00 per 100. Minimum shipment, 50 plants. Less than 50, 10 per cent plus. Cash with order, packing free.

RICHARD P. RESSEL
Mullino, Ore.

20,000 *Taxus cuspidata* upright, 2-yr. seedlings, 4 to 6 ins., and 2500 *Virburnum dilatatum*, 2-yr. T., 9 to 12 ins., field rows, \$12.00 per 100 and \$55.00 per 1000. Samples on request. Send for our L. O. list.

BOULEVARD NURSERIES
Dept. B Newport, R. I.

COLORADO BLUE SPRUCE.
40,000 2-year seedlings, bed run, from 3 to 5 inches. Stocky and well rooted. In lots of 500 or more, \$25.00 per 1000. Spring delivery. PETERS EVERGREEN NURSERY
Sherburn, Minn.

CHINESE ARBORVITAE SEEDLINGS.

Grafters, 1/8 to 3/8 in. cal., 7c each. 1-yr. edging, 6 to 12 ins., \$50.00 per 1000. 2-yr. edging, hedge size, 18 to 24 ins., 10c each. LUKE NURSERY, Paula Valley, Okla.

UNROOTED Pfitzer Juniper Cuttings, 8 to 10 ins. long, not trimmed; \$10.00 per 1000, via express.

KRONE'S FLOWER SHOP
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BED-GROWN CEDAR SEEDLINGS, 6 to 8 ins., \$35.00 per 1000. Cash, please. EPH KLEIN
210 E. Olive, Rte. 1 Enid, Okla.

DAPHNE ODORA and CAMELLIAS.
Best varieties.

ROY WILKINS NURSERY
Newberg, Ore.

FRUIT TREES

	Per 100	Per 1000
PEARS.		
Kieffer, 9/16 to 1 1/16-in.....	\$6.00	\$50.00
Kieffer, 7/16 to 9/16-in.....	4.50	35.00
Bartlett, 9/16 to 1 1/16-in.....	4.00	30.00
Bartlett, 7/16 to 9/16-in.....	4.50	35.00
Clapp Favorite, 1 1/16 to 1 3/8-in.....	8.00	70.00
DRAKE'S NURSERIES 4342 Branch Rd. Flint 6, Mich.		

DOUBLE-FLOWERING PEACHES.

Red, white and pink.	Each per 100	Each per 1000
12 to 18 ins.....	\$0.12 1/2	\$0.10
18 to 24 ins.....	.15	.12 1/2
2 to 3 ft.....	.20	.17 1/2
3 to 4 ft.....	.25	.20
4 to 6 ft.....	.35	.30

50 or more trees at 100 rate.
Field-grown Evergreen liners.
Greek and Irish Junipers.
1-yr. liners, 10c row run.
2-yr. liners, 15c row run.
Packing free for cash with order.
NAUGHER NURSERY
Chase, Ala.

CHERRIES.

Good height, well branched.	Each per 100	Each per 1000
Montmorency, Early Richmond, English Morello.		
Size	Each per 100	Each per 1000
7/16-in.....	\$0.50	\$0.55
9/16-in.....	.70	.65
1 1/16-in.....	.80	.75

BENTON COUNTY NURSERY CO.
Rogers, Ark.

Grafted and budded papershell pecan trees, peach, apple, plum, fig and famous blight-proof pineapple pear trees, and Concord and Niagara grapes. Write for free new catalog. HASS PECAN CO.
The World's Largest Pecan Nursery.
Lumberton, Miss.

We are going to have a surplus in pear, peach, plum, apricot, apple and persimmon trees and will have a few pecan trees. If interested in any of the above, we will be glad to furnish prices. Thank you. FITZGERALD NURSERY
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We have 50,000 1-yr. Peach Trees, 70,000 June Buds and a complete line of Fruit Trees and Shrubbery. Write for our prices before you buy. JOPPA NURSERY CO.
Jopka, Ala.

FRENCH PEAR AND APPLE SEEDLINGS.

Special prices quoted on application.
WALDO HILLS SEEDLINGS NURSERY
Aumville, Ore.

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VARIEGATED IVY.
A colorful combination of glossy green and ivory-white leaves, comparable in size to English ivy. Fast-growing and decorative. Sturdy, well rooted cuttings from select, clean stock, \$5.00 per 100, \$50.00 per 1000. ADAMS WHOLESALE NURSERY
2245 Broadway St. Temple City, Calif.

PACHYSANDRA TERMINALIS — Heavy rooted cuttings, \$6.00 per 100, \$50.00 per 1000. EAST HILL NURSERIES
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HARDY PLANTS

LIRIOPE.
But few plants will grow equally well in sun or shade, hot or cold, wet or dry. Liriope measures up to this. We have a nice stock of this great border plant to offer at the following attractive price. Nice field divisions ready now. Liriope muscari exiliflora, \$5.00 per 100. RIEGEL PLANT CO.
Experiment, Ga.

BLEEDING HEARTS. Per 100
Dicentra spectabilis, 3 to 5 ins.....\$30.00
Dicentra spectabilis, 5 to 8 ins.....40.00
and up.....15.00
Dicentra eximia, 5 to 8 ins. and up.....20.00
J. HENDRIKS, Grower
Box 27 Portage, Mich.

TWO HARDY PERENNIALS. Per 100
Iris kaempferi, mixed colors.....\$15.00
Hemerocallis kwanan flore-plena.....12.00
Blossom-size plants, J. B. certified. Free packing. Cash with order. BROOKFIELD GARDENS
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USE WELER'S HARDY PHLOX for propagation. Now is the time to make them. See our catalog, or ask for it. Seventy varieties from which to select. WELER NURSERIES CO., Inc.
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New and Standard Kinds. A most modern and complete selection. New Wholesale List now ready. Send for your Free Copy Now. CARROLL GARDENS
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FAMOUS CUSHION MUMS—Strong field clumps. Red, yellow, white, pink, bronze, \$10.00 per 100. Assorted colors, \$25.00 per 100. Minimum order, \$5.00. WONDERLAND NURSERIES
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See September 1 issue of the American Nurseryman for list of Hardy Plants. RICHARDS GARDENS
Plainwell, Mich.

HARDWOOD CUTTINGS

HARDWOOD CUTTINGS.
from Hardy Northern-grown Shrubs and Trees.
From our own plantings and blocks checked yearly for accuracy. Cut 7 inches. Per 1000

Aronia melanocarpa	4.00
Cydonia japonica	6.00
Cornus paniculata	4.00
sibirica	4.00
lutea (yellow bark)	4.00
amomum	4.00
Foraythia intermedia	3.00
spectabilis	3.00
Elder, Golden	6.00
Cutleaf	4.00
red-berried	5.00
canadensis	3.00
Hydrangea P.G.	5.00
Hydrangea A.G.	5.00
Privet, Amur	3.00
Regel (true)	3.00
Ibota	3.00
Honeyaukie, morrowi	3.00
bella albidia	3.00
bella rosea	3.00
tat. rosea	4.00
korolkowi	4.00
zabeli	5.00
syringantha	5.00
maackii	4.00
Diervilla trifida	4.00
Philadelphus grandiflorus	3.00
Mt. Blanc	3.00
Bouquet Blanc	3.00
coronarius	3.00
lemolnei	5.00
Physocarpus	3.00
Physocarpus opul. nanus	3.00
Sorbaria sorbifolia	3.00
Spiraea billardi	3.00
froebeli	3.00
thunbergi	3.00
vanhouttei	3.00
trichocarpa	3.00
Snowberry, white	3.00
Lilac, rothomagensis	5.00
Viburnum dentatum	4.00
Viburnum	3.00
Willow, Niohe	3.00
Wisconsin	3.00
Golden	3.00
Pussy	3.00
Rosa rugosa Belle Polveine	7.00
Rosa rugosa Hansa	7.00
Thuja pyramidalis	25.00
globosa	25.00
wareana	25.00

Packed free. Cash with order, please. Delivery in good order guaranteed.
THE SCOTCH GROVE NURSERY
Scotch Grove, Iowa

HARDWOOD CUTTINGS

Andorra Juniper (Jun. comm. dep. plumosa)	Per 1000 \$15.00
Pfitzer Juniper (Jun. pfitzeriana chinensis)	20.00
Koster Juniper (Jun. kosteri)	25.00
Pyramidal Arborvitae (Thuja pyramidalis douglasii)	20.00
Savin Juniper (sabina or Vonehron)	20.00
Lombardy Poplar	3.00
Privet, Amur River North	2.75
Willow, Niohe Golden Weeping	3.00
Willow, Wisconsin Weeping	3.00
Willow, Pussy, large French (pink-tinted)	5.00

All above from our own cutting blocks. True-to-name. Evergreens are trimmed cuttings, 8 ins. and over. All other cuttings, 7 ins. Every cutting is hand cut. Packed free; cash with order, please.

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ROSEBUSHES—Most complete list offered in East Texas. 2-year plants, grown right, graded right, packed right. Prices consistent with quality of stock and service rendered. Wholesale list just off the press. Ask for your copy now before stock is broken.

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ROSEBUSHES

Grown, dusted and fertilized by the latest approved methods. Write for complete variety and price lists.
What a difference just a few cents can make!

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TWO-YEAR, BUDDED ROSEBUSHES.
Quality, Price, Service. Ask anyone we serve. See our display ad in the Nov. 1 issue.

Write for new wholesale list.
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OREGON ROSES. 2-year, field-grown on multiflora, in all the most popular standard sellers. Now booking orders for winter and spring shipment. Also, dormant buds on manetti. Send for list.
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Surplus Stock
can be easily and quickly turned into Cash
Listing it in the
American Nurseryman Classified Ads.

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PEACH PITS FOR PLANTING.
Southern collected, high germination. Small seeds, about 6,000 to a bushel, \$3.50, medium, \$3.00, large, \$2.50. Seedling Peach trees for budding or grafting, \$25.00 per 1000, \$3.00 per 100.

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Taxus cuspidata.
We offer new crop direct from Japan. Let us know the quantity you require.
AMERICAN BULB CO.
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MONTMORENCY CHERRY SEEDS.

Germinate well; seedlings bud readily or make good trees without budding. Dry or stratified. Postpaid, 60c per lb., \$5.00 per 10 lbs. By express or freight, 40c per lb.
NOBLE NURSERY,
Noble, Okla.

SHRUBS AND TREES

LINING-OUT STOCK.

Collected.	Per 100	Per 1000
Azalea calendulacea,		
6 to 12 ins.	\$3.50	\$30.00
Acer saccharum, 12 to 18 ins.	1.50	10.00
Calycanthus floridus,		
12 to 18 ins.	2.50	20.00
Cornus florida, 6 to 12 ins.	2.00	15.00
Comptonia asplenifolia,		
12 to 18 ins.	4.00	35.00
Cercis canadensis, 6 to 12 ins.	1.50	12.00
Carpinus caroliniana,		
12 to 18 ins.	2.00	15.00
Fagus americana, 12 to 18 ins.	2.00	15.00
Fraxinus americana,		
6 to 12 ins.	1.50	12.00
Liriodendron tulipifera,		
6 to 12 ins.	1.50	10.00
Magnolia acuminata, 4 to 6 ins.	3.00	25.00
6 to 12 ins.	4.00	35.00
Lonicera japonica, 6 to 12 ins.	1.50	12.00
Vinca minor, medium	1.25	8.00
Ilex opaca, 4 to 8 ins.	2.50	20.00
Juniperus virginiana, 4 to 8 ins.	1.25	10.00
Kalmia latifolia, 4 to 8 ins.	2.50	20.00
Rhododendron maximum,		
4 to 8 ins.	2.50	20.00
vulgaris alba	1.50	12.00
Taxus canadensis, 12 to 18 ins.	2.00	15.00
Pinus echinata, 12 to 18 ins.	2.00	15.00

O. H. PERRY NURSERY CO.
Box 545 McMinnville, Tenn.

LINING-OUT STOCK.

Heavy-rooted, once-transplanted, shipped in peat.	Per 100	Per 1000
Heather		
Med. Hybrid	\$10.00	\$ 90.00
Med. Hybrid, white	12.00	110.00
Mrs. Maxwell	10.00	90.00
Springwood White	10.00	90.00
County of Wicklow	11.00	100.00
Hamilton	11.00	100.00
Carnegie rose	12.00	110.00
Cenoria Brilliant	15.00	140.00
Valvillia	15.00	140.00
Tetralix	15.00	140.00
King George	14.00	130.00
Mrs. J. H. Beale	12.00	110.00
vulgaris alba	12.00	110.00
Daphne cneorum	14.00	130.00
Daphne odora	12.00	110.00
Lithospermum	15.00	140.00
Viburnum burkwoodii	11.00	100.00
Clematis montana alba	20.00	200.00
Azalea mollis, cream, 2-yr.	12.00	110.00

Packed free, cash with order. Shipped F.O.B.

FOUR STAR NURSERY
Route 3, Box 3529 Edmonds, Wash.

WEeping Willow.

Salix babylonica, Excellent trees, with well developed tops, roots and calliper.

	Per 10	Per 100
4 to 5 ft.	\$ 4.00	\$ 35.00
5 to 6 ft.	7.50	60.00
6 to 8 ft., 1 to 1 1/2-in. cal.	12.50	100.00

Salix elegantissima, Thurlow Golden Weeping Willow, 4 to 6-ft. and 8 to 6-ft. sizes priced as above.

Lining-out grades, both varieties:

	Per 100	Per 1000
2 to 3 ft.	\$7.50	\$65.00
3 to 4 ft.	8.50	75.00

Ask about our Ash, Elm, Maple and Peach trees.
F.O.B. Exmore, Va. Packing additional.
TANKARD NURSERIES
Exmore, Va.

JAP. MAPLE SEEDLINGS.

GRAFTING GRADE.
Booking orders for fall, 1949, delivery. \$12.00 per 100. \$100.00 per 1000.

Carefully graded for correct diameter. Orders must be in by March 1, 1949, as only plants on order will be transplanted.

20 per cent deposit, balance on delivery.

ELWOOD HUBBS
204 Delaware Ave. Palmyra, N. J.

TEXAS UMBRELLA TREE.

Melia azedarach umbraculiformis.

We are offering good, true stock of this most desirable rapid-growing tree. Taking orders for delivery now and later.

15 to 18 ins. \$ 4.00 per 100

20 to 28 ins. 15.00 per 100

50 at the 100 rate.

RIEGL PLANT CO.
Experiment, Ga.

QUALITY LINERS.

	Per 100
Red-flowering Dogwood, 10 to 15 ins., grafts	\$65.00
Canadian Hemlock, 5 to 6 ins., trans.	10.00
Pieris japonica, 4 to 8 ins., trans.	20.00
Magnolia soulangeana, 6 to 12 ins., grafts	95.00
Christmas Rose (Helleborus), 2-yr. trans.	37.50
Taxus capitata, 6 to 8 ins., trans.	25.00
Azalea schlippenbachii, 4 to 8 ins., trans.	25.00
Red Japanese Maple, 8 to 15 ins., grafts	75.00

Send for complete new list.

POSSUM HOLLOW NURSERIES
6327 Magnolia St. Philadelphia 44, Pa.

RED JAP. MAPLE SEEDLINGS.

Carefully selected for good red color.

Per 100 Per 1000

Acer palmatum atropurpureum

10 to 12 ins. 10.00 350.00

8 to 10 ins. 30.00 250.00

6 to 8 ins. 25.00 200.00

4 to 6 ins. 15.00 120.00

These seedlings are exceptionally red.

Acer palmatum atropurpureum. Not selected for color.

Per 100

8 to 12 ins. \$10.00

4 to 6 ins. 6.00

Cash with order. Special price on 2000 or more.

ELWOOD HUBBS
204 Delaware Ave. Palmyra, N. J.

MIMOSA.

Silk Tree—Albizia julibrissin.

We have a fine healthy stock of this rapid-growing, desirable small tree. Foliage fine and feathery. Large clusters of pink flowers in early spring. Very attractive.

Booking orders for delivery now and later.

5 to 8 ins. \$ 5.00 per 100

10 to 20 ins. 8.00 per 100

24 to 30 ins. 15.00 per 100

40 to 60 ins. 50 each

50 at the 100 rate. Not less than 10 of the 50c size.

RIEGL PLANT CO.
Experiment, Ga.

PRIVET.

We have a fine lot of extra-heavy California Privet, 3 to 4-ft. grade.

Wholesale only.

CHARLES MOHM & SONS, Inc.
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25,000 Hardy Pixwell; 25,000 Shrubs, Amur

River North Privet, 100,000 8-in. cuttings,

\$3.00 per 1000; Kentucky coffee beans, 25c

per lb.; Sycamore (Platanus), 45c; Allanthus,

75c; Catalpa, 95c.

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KNOCK-DOWN FLATS.

Made from a good grade of Southern Yellow

Pine, since Cypress is not available.

Standard specifications, inside measurements.

18x12x23 16.25 per 100

16x14x33 20.50 per 100

20x14x23 20.00 per 100

20x14x33 23.00 per 100

22x16x23 22.00 per 100

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Flats are the best. Why pay more? Our

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A pure sedge peat, sun-cured, air-dried, analyzed 2 to 2½ per cent nitrogen, 96 per cent humus; acidity, 5.3 to 5.8. Golf courses demand Mel-lo Peat—will not ripple after top dressing greens. Greenhouses, nurseries and landscape gardeners repeat orders year after year. Not to be confused with much soils advertised as Peat. Mel-lo Peat is analyzed for your protection. Delivered 11,300 bushels to the State of Ohio Forestry Nursery, Marietta, O.—A good recommendation for Mel-lo. We deliver in truckload within 200 miles of our plant. Write for prices. Order early. Check with order.

5 to 10 2-bu. bags, F.O.B. our plant	\$1.25
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Excellent for lawns, gardens and shrubs, Snapdragons, Azaleas, Hydrangeas, Cyclamen, Camellias, Gloxinias, Carnations, Poinsettias, Tuberosus Begonias and many other plants. Be safe with Mel-lo.

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\$3.80 per bale, or \$3.65 per bale for 10 or more.

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Suitable for potting roses, shrubs, perennials, bulbs and other items. Bottoms sealed. Top diameter, 7 ins.; bottom, 5 ins.; height, 9 ins. Plant pot and all, as roots grow through sides. Pot lasts 6 to 12 months on top of ground. \$6.00 per 100, \$50.00 per 1000. Weight, 25 lbs. per 100. Samples on request.

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MINNESOTA WHITE CEDAR PLATS

12x16x2½	\$18.25 per 100
14x20x2½	22.00 per 100
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Other sizes quoted on request. Also crating and other lumber, Aspen and Pine. F.O.B. Cook, Minn. Attach check.

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PEAT MOSS.

Highest-quality acid sphagnum peat moss weighing about 8 lbs. per loose bushel. 120-lb. hydraulic-compressed bales, \$3.25 each; 10 or more bales, \$3.00. Large burlap half-bale bags, \$1.60 each; 10 or more, \$1.50 each.

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HIGH NITROGEN HORTICULTURAL PEAT. Unexcelled for soil-improvement. Used by leading growers for quarter century. One 3-bushel bag, \$1.25; 10 bags, \$1.16; 25 bags or more, \$1.00.

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JOINS BATTELLE STAFF.

Dr. K. Starr Chester, who has joined the staff of Battelle Institute, Columbus, O., will head the institute's research program in the agricultural sciences and in plant and animal nutrition.

Dr. Chester was until recently head of the department of botany and plant pathology and director of the research foundation of Oklahoma Agricultural and Mechanical College. He has been associated with the college for the past eleven years, prior to which he conducted research for five years at the Rockefeller Institute for Medical Research, Princeton, N. J.

The appointment of Dr. Chester to the Battelle staff, according to Director Clyde Williams, is a preliminary move toward the expansion of the institute's research activities in the agricultural field. During the past five years, Battelle has been conducting studies on the effects of trace elements in soil on plant health and nutrition. The results of these investigations indicate that better understanding of the role of trace elements in plant nutrition may lead to increased production and improved quality of agricultural products. The expanded research program will emphasize such studies and also include work on insecticides and fungicides, herbicides, fertilizers and other problems related to agriculture.

Dr. Chester is the author of two published books, "Nature and Prevention of Plant Diseases" and "The Cereal Rusts as Exemplified in the Leaf Rust of Wheat," and has written numerous technical and popular science articles.

A. A. N. REGIONAL WRITERS.

The regional writer plan, approved in September by the market development and publicity committee of the American Association of Nurserymen, by which qualified persons will write releases for the nursery industry, is under way. Especially selected garden writers, designated for each region of the country, write an article each month on some planting topic suggested by the com-

mittee. Each release is approved by A. A. N. headquarters at Washington, D. C., a chairman in the area for which it is intended and Verne Burnett Associates, the A. A. N. publicity agency. Releases are mimeographed and mailed from the offices of the agency to the press in the various regions, which have been set up from the standpoint of climate and editorial needs.

The writers, who are either garden editors, special writers for newspapers on horticultural subjects or nurserymen, are: Zone 1, Helen Grant Wilson, Cleveland Plain-Dealer; zone 2, not named; zone 3, Ruth Layton, St. Louis Globe-Democrat; zone 4, John J. Pinney, Willis Nursery Co., Ottawa, Kan.; zone 5, Mary Lake, Fort Worth Star-Telegram; zone 6, Arthur Navlet, Oakland Tribune, Norvel Gillespie, Pasadena Star; Dr. John Hanley, Seattle, Wash., and zone 7, George Kelly, editor, Green Thumb, Denver, Colo.

ALFRED L. KERN, field manager of the Kern Nursery, New Castle, Ind., left last month to spend the winter months at Daytona Beach, Fla.

JOSEPH A. THEISEN, who operated a perennial nursery at Warren, Mich., has recently moved to 3826 North Woodward avenue, Royal Oak, Mich., where he has opened a retail garden store.

THE Nobel prize for 1948 in physiology and medicine has been awarded to Dr. Paul Herman Muller, Switzerland, for his work on DDT insecticides in the research laboratories of Geigy Co.

HAROLD CLEGG, Varsity Landscape Service, Lafayette, Ind., has purchased 3.17 acres inside the corporate limits of Lafayette from the Clark Floral Co. This acreage was formerly the site of the Dorner Greenhouses and contains some of the original structures. It is adjacent to twenty acres of stock lined out by the Varsity Landscape Service on leased land. Plans for the new acreage call for a lath house, propagating frames and two acres in field-grown ornamentals. The old nursery, at Thirtieth and South streets, is being sold off for building sites and will be discontinued within the next few years. Downtown offices will be maintained at 105 North Tenth street, where they were opened in 1944 to maintain contacts between operations in West Lafayette and East Lafayette. Mr. Clegg purchased the Varsity Landscape Service in 1938.

CLAVEY DAUGHTER WEDS.

Jeannine Marie Clavey, daughter of Mr. and Mrs. Roy F. Clavey, Deerfield, Ill., was married November 27 to Arthur P. Howard, of Northbrook, Ill., in the parish hall of St. Norbert's church, Techy, before a huge cross of white chrysanthemums. The bride's sister, Carol Irene Clavey, was maid of honor. After a reception at the Glencoe Woman's Club, the couple left by plane for San Luis Obispo, Calif., where the groom attends school. The bride's father is president of F. D. Clavey Ravinia Nurseries, Inc., and vice-president of the Illinois State Nurserymen's Association.

B. D. TEAS WEDS.

Miss Lois Reid, Leda, Ill., became the bride of Benjamin D. Teas, Houston, Tex., the evening of November 19 at the House of Weddings, Houston. She wore an ivory traveling suit with beige accessories and a corsage of white orchids that had been especially grown for the occasion in the Teas orchid conservatory.

Benjamin Teas is the youngest son of Edward Teas, Teas Nursery Co., Bellaire, Tex. In partnership with his brother Edward, Jr., he operates a wholesale nursery and landscape service at Spring, Tex., twenty miles north of Houston. They are the third generation in the Teas Nursery Co., since it was started in 1843.

CHLORDANE MAY CONTROL JAP BEETLE GRUBS.

When added to the soil for the purpose of controlling Japanese beetle grubs, Chlordane has been found by entomologists of the United States Department of Agriculture to have more promise for this purpose than any other material tested thus far, it was announced recently. Several other soil-inhabiting insect pests in the grub stage are also effectively controlled at the same time with the same application.

Chlordane, which in the past year or two has been widely used for the control of grasshoppers, roaches and ants, is about ten times more toxic to the grubs of the Japanese beetle than DDT and about 600 times more toxic than lead arsenate, the two materials that are recommended for the control of the grubs.

According to experiments conducted by entomologists of the bureau of entomology and plant quarantine at the Moorestown, N. J., laboratory, Chlordane is effective for the control of the beetle grubs in lawns and other

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Experienced landscape foreman and architect to take charge of our landscape department, one who can draw plans, estimate, sell and supervise plantings. Must be energetic, honest, thorough and willing to work. Permanent position. State experience, references and salary expected in first letter.

HALLA NURSERY
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FOR SALE

Well established retail nursery on best location in fastest-growing city in southern Texas. New office, greenhouse, storage rooms, garages. Large front parking area, plenty of salesroom space. Reason for selling, health and other business. Address Box 585, care of American Nurseryman.

FOR SALE

Landscape gardening business. Grossed over \$15,000.00 during past 12 months. Land for growing stock and business headquarters also available. A complete setup. For information write:

CHARLES M. SNYDER, JR.
1040 Clark Ave. Napa, Calif.

SITUATION WANTED — Dutch nurseryman, 38, married, experienced in propagating all kinds of nursery stock, both under glass and in the field, and also in selling and landscaping, desires position. Has one year's experience as superintendent and salesman in an American retail nursery. Those interested write for further information. Statement of salary you have in mind for a man with push and willingness will be appreciated. Address Box 592, care of American Nurseryman.

HELP WANTED — Man who understands greenhouse work to take charge of propagation handling seedlings, propagation by cuttings, also grafting experience necessary. General line of nursery stock, azaleas and rhododendrons. Furnish references and state salary expected. **BAGATELLE NURSERY**, P. O. Huntington Sta., L. I., N. Y.

FOR SALE — One of the finest locations in Cheyenne for a nursery and flower shop. 36 x 100-ft. steel frame greenhouse, small 4-room house and a modernistic nursery salesroom on main boulevard. Wonderful opportunity for someone. Write: P. O. Box 682, Cheyenne, Wyo., if interested.

turf areas. It appears that one treatment of Chlordane will remain effective for at least two years. It is not yet known whether Chlordane will last as long as DDT, one application of which is still effective after nearly six years. Tests with forty different soil types indicate that it requires only ten pounds of Chlordane per acre to kill ninety-eight per cent of the Japanese beetle grubs within a week and a half. It takes longer in cooler weather. Treatments in late fall did not kill all of the grubs until the following spring.

The tests by federal entomologists indicated that applications of Chlordane at rates up to ten pounds per

FOR SALE

Established nursery started by present owner 21 years ago. Well located, about 400 miles south of Chicago, 1/4 mile from town of 20,000. 135 acres of land; 1 modern 6-room residence, 2 tenant houses, 3 barns, 2 double garages, packing shed and several other outbuildings, 1,000 square feet of greenhouse; tractors, truck and other necessary tools. Approximately 100,000 evergreens, 1, 2, 3, 4 and 5 years old; small quantity of shrubs and shade trees.

Have a good established wholesale and retail business, and the plants now growing in the nursery will clear entire purchase price in 5 years or less. We are not giving the place away, but it is a splendid proposition for 1 or 2 young men with nursery experience and sufficient cash to handle deal. Could give possession shortly after the first of the year. Address Box 591, care of the American Nurseryman.

SITUATION WANTED

Dutch nurseryman residing in the U.S.A. wants position, preferably in Wash., Oregon or northern Calif. Had leading position in Holland, propagating and growing nursery stock for over 25 years. Specialized in grafting of rhododendrons and azaleas. Address Box 593, care of American Nurseryman.

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acre had no noticeable effect on common grasses, particularly those grown for lawns or golf courses; spring rye grass, soybeans, evergreen nursery stock, most garden vegetables, strawberries, hybrid corn and the annuals upon which it was tested. However, no recommendations have been made thus far by the bureau of entomology and plant quarantine for the use of Chlordane to control Japanese beetle grubs.

UNTIL March 15 Jacob C. Van Heiningen, proprietor of South Wilton Nurseries, South Wilton, Conn., will be at Delray Beach, Fla.

UNITED HORTICULTURE.

Robert Pyle, West Grove, Pa., was reelected president of the American Horticultural Council when its third annual conference was held, October 25 and 26, at Cornell University. Vice-presidents are E. L. D. Seymour, New York; Mrs. Rufus N. Garrett, Eldorado, Ark., and Arthur G. McKee, Cleveland, O. The secretary is J. Franklin Styer, Concordville, Pa., and treasurer is John Nash Ott, Jr., Winnetka, Ill.

Attendance was chiefly of the members of the commissions, whose reports showed progress. Of chief importance was Dr. Styer's report on nomenclature, which included several recommendations for revision of the international rules.

FULLMER ARBORETUM.

The Fullmer Arboretum, named in honor of Dr. Edward L. Fullmer, who headed the biology department of Berea College, Berea, Ky., from 1903 to 1940, was dedicated in a ceremony and an open-house program November 1 on the Berea College campus. Dr. Fullmer had collected many rare trees and shrubs for the school, bringing more than 125 species from American and European forests.

A bronze plaque mounted on a granite glacial boulder was unveiled as part of the ceremony, and several hundred guests attended an open house held in the greenhouse laboratory from 1 to 5 p. m.

AN AWARD of merit was won by Bay State Nurseries, Inc., North Abington, Mass., for its exhibit of *Thymus vulgaris* Border Gem in the annual autumn flower show held last month by the Massachusetts Horticultural Society.

HAVING rented the Gray Knoll Plant Farm, Browns Summit, N. C., for the past two years, F. W. Spragg has started in business for himself, operating as Spragg Gardens, Route 2, Box 14, Browns Summit, N. C.

BECAUSE of the death last June of Mrs. Pauline F. Jacobs, one of the partners in the Tennessee Nursery Co., Cleveland, Tenn., the partnership was automatically terminated. Prior to that date the partnership consisted of A. J. Fletcher, Jr.; Mrs. Leah F. Hoyle, L. C. Fletcher, Mrs. A. J. Fletcher, Sr., and Mrs. Jacobs. In the reorganization of the company Mrs. Hoyle did not elect to become a partner and retired as of June 24, 1948.

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(Left) Supported on greenhouse bench stands (standard equipment) Rapid-Wheel gravity conveyor handles boxes of tender young plants for a large nursery. No valuable aisle space is used.

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10 lb. drum \$8—25 lbs. \$15—50 lbs. \$25—100 lbs. \$40
Commercial growers and dealers receive 32-1/2% discount from the above retail prices.

BUY HYPONEX from your jobber or send \$1 for 1 lb. (makes 100 gallons). \$1 credited on first order for 1 drum or case.

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This Business of Ours

Reflections on the Progress and Problems of Nurserymen

By E. Sam Hemming

COLOR COMBINATIONS.

A great many of our garden enthusiasts, particularly those in the novice class, make a fetish of color schemes in their flower borders. In fact, too often our garden magazines for the amateur lean in the same direction. In general, this is an error; it is better to encourage gardeners to use color combinations rather than color schemes.

There are too many factors influencing plant life to make the planning of color schemes practical. Climate, exposure, soil conditions and seasonal variation are among the many factors that mitigate against reproducing desired color schemes. A scheme successful in one section or season may fail in another.

Flower colors, with few exceptions, do not clash but blend in great variety, chiefly because foliage acts as a foil. The only shades that do clash are the bright reds, the dark blues and purples and the magentas when used together. These can be used in combinations with white always and, with some exceptions, with all pastel shades. Light pink with bright red is not a pleasing combination nor is light blue with red. The worst offenders are the magentas and purples as typified by the flowers of *Azalea amoena*. This plant looks well only with white flowers, and the more white, the better. Invariably man customers like bright or vivid colors or contrasts, while the ladies prefer the pastel colors.

To secure the best color effects, the combination of two colors is most practical and pleasing. Unfortunately, it is only through practice, experience and observation that you can build up lists of effective combinations for your own section. To illustrate the difficulties one can run into, a customer asked for a white garden of tulips and hyacinths. The garden was formal, and Carrara tulips and L'Innocence hyacinths were used, but the unexpected happened. The two varieties of plants flowered at the same time, but those at the shadier side of the garden were a full week behind those at the other side, reducing the garden's effectiveness, and yet the shade was cast only by a low boxwood hedge.

Among bulbs that make effective color combinations are Carrara with King George V (red) tulips and Campernelle jonquils with Muscari

Heavenly Blue in naturalized plantings.

Among tree and shrub combinations, there are white with pink dogwoods; also white dogwood with red-bud, or Judas tree; forsythia with *Spiraea arguta*; *Azalea ledifolia* (very pale var.) with *Azalea Hinodegiri*, and deep purple with white lilacs. And a showy combination can be had in the south with the bright red berries of the nandina with the glossy wax-leaved privet.

Similarly, attractive combinations of colors can be had with flowering trees or shrubs and certain bulbs or herbaceous perennials. *Spiraea vanhouttei* with purple bearded iris and Japanese weeping cherry with *Evangeline* daffodils (white) are examples.

Among herbaceous perennials the possible pleasing combinations are endless, but here it is most important that you build up your own lists by

experience and observation. Our nursery catalogs fail in this regard, for if a customer attempts to pick out color combinations from the flowering dates generally listed, he is not likely to succeed. E. S. H.

PLANT NOTES.

[Continued from page 18.]

loba and *L. hepaticaeifolia* (these are both cymbalarias if you follow modern "splitters") seldom live through our springs, need fear few kinds of rock garden proportions.

To clear the way for more pleasant matters, let us first dispose of a few kinds that have been discarded for general use because of their unsatisfactory behavior. Even though *L. aquitriloba* has almost everything in the way of beauty and usefulness to recommend it, there is little use,

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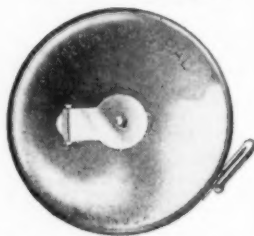
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in a rigorous climate like this, in trying to carry such a delicate Corsican through our winters and springs. *L. hepaticaeifolia* is a little hardier and often can be carried through on a north wall, where snow can stay on it until the weather becomes settled. On a south wall here it almost invariably passed out between the going of snow and the coming of warm weather. Neither of these is sure to self-sow here; so it is a gamble about keeping them.

L. cymbalaria (*Cymbalaria muralis* of some) can stand about the same amount of cold as the next preceding and may be handled in the same way, i.e., on a north wall. This species has varied not a little under cultivation and in its natural travels; so one has a fairly wide selection. There seems to be some confusion about the plant known in gardens as *L. pallida*. Seed lists mention it as a distinct species, while all material that I have had under that name was no more than a variety of *L. cymbalaria* (named in Hortus as *Cymbalaria muralis* variety *Maxima*). All forms of *L. cymbalaria*, or *Cymbalaria muralis*, as you prefer, are "trespassers," except variety *globosa*, which makes a fine little mound of foliage and is, incidentally, the most difficult of the lot for a northern gardener to keep over winter. In warmer climates it would make a highly useful plant, especially for edging and for rock garden use. Varieties *Alba*, *Grandiflora* and *Rosea* are like the type except in flower, the differences being indicated by the varietal names, while variety *Maxima*, which appears to be the same as *L. pallida* of gardens, has larger and lighter-colored flowers.

One of the most satisfactory of small toadflaxes for northern gardens is a plant known in gardens as *L. organifolia*. It is not only hardy, but it always remains small and never spreads except by seeding. It does self-sow, though, and might make a nuisance of itself in choice company, although we found it useful in most parts of the garden. Its eventual height of four or five inches is generally in keeping with the rock garden scene, and its violet-colored flowers, usually with whitish centers, coming from May until frost, are always welcome.

Perhaps the next in importance as a garden plant for northern conditions is *L. alpina*. Judged from the standpoint of beauty, it is far ahead of the first choice named before, but it seldom lives over here. That, however, is not a great handicap, for it nearly always perpetuates itself by self-sowing, and it is never out of flower from early spring until late

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autumn. It apparently makes little difference where alpina is planted so far as hardiness is concerned; plants on a north wall pass out with as much ease as those in full sun, and they never bloom so well as the ones in a southern situation. It may not be generally understood that most linarias come quite readily from stem cuttings, making it possible to keep a stock of the good colored forms of *L. alpina* by wintering the rooted cuttings in a protected frame. And this species does have some excellent varieties, notwithstanding the fact that many authors say that none is "so charming as the type."

L. glacialis, in its lilac and golden adornments on 6-inch plants during June, is a good plant. It lacks the long-blooming habit of the next preceding and has the same fault of being impermanent in this climate. I had a plant several years ago which appeared to be close to *glacialis*, though it bloomed over a much longer period and the color was quite uniformly lavender-purple. We used it as an annual, when it came into flower in June and continued until frost. When found at all, it will probably be listed as *L. faucicola*, *L. paucicolor* or *L. glacialis faucicolor*. The first name is correct, I believe. In any case, it is a most satisfying plant, never spreading and always, from the first, showing an abundance of flowers of a pleasing color.

I was much interested for several years in another Spanish species, the two next preceding also coming from that country. The plant was *L. supina* and in its typical form has rather lax stems which eventually reach a height of six to eight inches. It bears large flowers in a bewildering range of hues, often in some shade of yellow or cream with contrasting centers of red, brown, mahogany or otherwise. That it is quite amenable to selection was shown by the fact that four years' work here brought a light cream self which finally came close to 100 per cent true. A form, *L. supina nevadensis*, is most unusual in its deep mahogany-red color, reminding one of the deeper shades found in *L. tristis*, as that species is now found in gardens, though type *tristis* is described as being yellow and brown. All kinds mentioned in this paragraph are essentially annuals in my climate, although they are spoken of as perennials in the literature (biennial in the case of *L. tristis*) and would probably prove perennials in warmer sections. Treated as annuals, they bloom from June until frost.

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than anticipated, with several really good things omitted, but I should like to mention one annual (annual in warm or cold countries), *L. broussonetia*, which is *L. multipunctata* of lists. This is one of the best rock garden annuals that I know, its small mounds of bluish foliage, usually not over three inches high, making a pleasing picture throughout the summer. Its addition of black-spotted yellow flowers, abundantly produced over that same long period, makes it a pleasing companion in many a rock garden planting. It can be had in bloom in pots at planting time by starting the seeds in April.

FRANK S. SACCOCCIO, who is a junior at Brown University but has been in the nursery business for six years, is proprietor of the Tupelo Landscape Service, 23 Aldrich avenue, Cranston, R. I.

FOR fifteen years an employee of the Daniels Nursery, Long Lake, Minn., C. Ed Sweeney has been named landscape associate of the company. In his new capacity he will be operating his own business, but as an associate of the Long Lake firm. Mr. Sweeney started with the firm in 1933 as a laborer and more recently has been landscape designer and manager of the landscape crews.

LEAF PATTERNS.

[Continued from page 11.]

green and usually glabrous on the underside. The pink flowers are borne in three-flowered clusters in June and are followed by attractive red fruits in September. The red fall foliage and abundant fruits make this a handsome and popular shrub.

Cotoneaster hupehensis, Hupeh cotoneaster, is one of the most attractive cotoneasters, reaching a height of six feet, with spreading and arching branches. The branches are pubescent at first, but soon become glabrous and purple. The purplish-green, elliptic to ovate leaves are three-fifths to one and two-fifths inches in length and grayish pubescent on the underside. The branches are heavily clustered with white flowers in May and bright red fruits one-third inch in diameter in August and September. This species, with *C. racemiflora soongorica*, is among the best of the flowering cotoneasters. The leaves turn yellow in the fall.

Cotoneaster racemiflora soongorica, Sungari redbead cotoneaster, is a graceful shrub with upright, spreading branches, reaching six to eight feet in height. The grayish-green, oval leaves, with an abrupt tip, are three-fifths to one and one-fifth inches in length and slightly pubescent beneath. The white flowers are produced in upright clusters in May and followed by large red fruits one-third inch in diameter in September and October. This is an excellent flowering and fruiting shrubs for use as a specimen or general border plant.

Cotoneaster rosea, red currant cotoneaster, is a slender-branched shrub to six feet in height. The bluish-green elliptic to ovate-oblong leaves are one-quarter to one-half inch in length and grayish-green beneath. The attractive pink flowers appear in June and are followed by glabrous red fruits one-quarter inch in diameter in September and October.

Cotoneaster salicifolia floccosa, hardy willowleaf cotoneaster, is an evergreen, upright, spreading shrub with drooping branches, reaching a height of ten to twelve feet when hardy. The glossy, dark green, oblong leaves are one and one-quarter to three inches in length. The young leaves are woolly beneath, but become partly glabrous at maturity. The showy white flowers are produced in May or June and are followed by bright red fruits in October. The flowers and fruits are often absent in colder climates, but the foliage and habit of growth are attractive. The variety *floccosa* is hardier than the

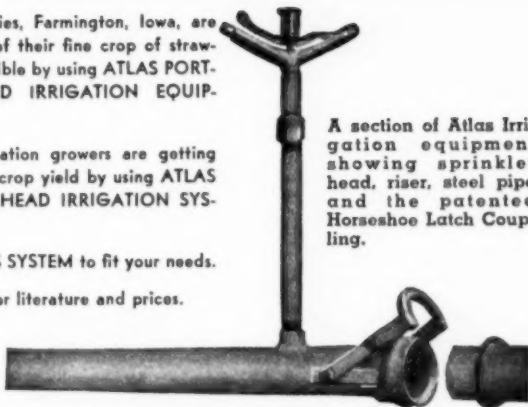
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Cotoneaster zabeli, cherryberry cotoneaster, is a slender, arching, branched shrub to five feet in height. The dull, dark green, broad oval to ovate leaves are three-fifths to one and one-fifth inches in length and yellow tomentose beneath. The nodding pink flowers are borne in May and followed by bright red fruits one-quarter to one-third inch in diameter in September and October. The foliage turns yellow in the fall.

Cotoneaster frigida, Himalayan cotoneaster, is a tall shrub or small tree to eighteen feet, but not so hardy as the other species and more adaptable to the southern states. The dull green, elliptic-oblong leaves, two and two-fifths to four and four-fifths inches in length, are pale and slightly hairy beneath. The white flowers are borne in dense clusters in June, followed by conspicuous bright red fruits in late August and persisting until early winter. It is not generally adapted to Ohio and the region north.

Black-fruited Types.

Cotoneaster ambigua is a species closely related to *C. acutifolia*. The dull green, ovate leaves are smaller, and the main vein is more raised than *C. acutifolia*. The pink flowers are followed by black fruits containing three or four nutlets in the fall. The plant is usually placed on the discard list.

Cotoneaster acutifolia, Peking cotoneaster, is an erect shrub ten to twelve feet in height, with slender spreading branches. It is one of the hardiest of cotoneasters. The dull green, elliptic-ovate to oblong-ovate leaves are four-fifths to two inches in size and lighter green on the underside. The pinkish flowers in late May develop large black fruits, one-third inch in diameter with two nutlets, in September and October. The plant is generally considered inferior to the other black-fruited types, but may still be used in northern states because of its hardiness.

Cotoneaster lucida, hedge cotoneaster, is a shrub of upright growth to ten feet in height. The glossy green, elliptic to ovate-shaped leaves are four-fifths to two inches in size. The pink flowers in May are followed by rather large black fruits, one-third to two-thirds inch in diameter, in September. It is often used as a sheared hedge.

Cotoneaster foveolata, glossy cotoneaster, is a vigorous, upright-growing shrub to twelve feet in height, with stout spreading branches. The large, dark green, el-

liptic to ovate-oblong leaves are one and four-fifths to three inches in length and pubescent on the underside. The pink flowers in June are followed by black fruits in September. The foliage turns red and orange in the fall. This is one of the best black-fruited forms and can be used as a specimen or border shrub or clipped for a hedge plant.

Cotoneaster melanocarpa is a shrub of upright, spreading branches to six feet in height. The dull dark green, broad ovate to ovate-oblong leaves, four-fifths to one and four-fifths inches in length, are white tomentose beneath. Pinkish flowers in May are followed by black fruit one-quarter inch in diameter in August. This is not so desirable a species as several others.

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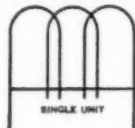
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Cotoneaster nitens, pink blush cotoneaster, is a densely branched shrub to five feet in height, with slender spreading branches. The small, nearly round, glossy, dark green leaves are one-third to four-fifths inch in length and slightly hairy on the underside. The pink flowers in June are followed by purplish-black fruits in August and September.

In summing up the general landscape uses for the above cotoneasters, the following make excellent hedges

when planted close together and sheared: *C. dielsiana*, *C. foveolata*, *C. lucida*, *C. divaricata* and *C. acutifolia*.

Many of the species are ideal as specimen shrubs on lawns where the plants have sufficient sunlight and room for development. They are suitable also in the mixed shrubbery border. Among the best flowering coto-neasters are *C. divaricata*, *C. dielsiana*, *C. racemiflora soongorica*, *C. rosea* and *C. foveolata*. The most attractive red-fruited types are *C. dielsiana*, *C. divaricata*, *C. hupehensis*, *C. r. soongorica* and *C. zabeli*. Black-fruited species are *C. acutifolia*, *C. foveolata*, *C. lucida* and *C. nitens*.

COVER ILLUSTRATION.

Pinus Griffithi (Excelsa).

Pinus excelsa was for a time re-named *P. nepalensis* and appears in "Standardized Plant Names" as *P. griffithi*. Commonly known as the Himalayan pine, though sometimes called the Himalayan white pine or Bhotan (Bhutan) pine, it is a handsome tree, with regularly whorled spreading branches, the upper ones ascending and the those below more or less decumbent, with the ends up-turned. The spread of the branches is wide in proportion to the height of the tree.

The leaves, which occur in bundles of five, are six to eight inches long, 3-angled and of a silvery or bluish-green color. The cones are of the same length as the leaves, pendant when mature, slightly curved and pointed at the apex.

The varied names of the tree reflect its origin in the Himalayan mountains, in the districts of Nepal and Bhutan, where it is said to attain 150 feet in height, forming a broad open pyramid. The term excelsa, meaning lofty, is said to refer not to the stature of the tree, but to the elevation at which it is found in its native habitat, 5,000 to 12,500 feet.

Specimens rank high as landscape trees where they are in rich, moist loam and in a sheltered, well drained site. In too light soil or in exposed locations the tree is less pleasing, while in heavy clay the growth is slower and less striking. It is reported hardy as far north as Massachusetts, but may suffer in severe winters there.

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[Continued from page 12.]

its foliage produces a real splash of red in the autumn landscape.

Some of the cotoneasters move out of the rock gardening field into the larger scope of bank planting. The most rugged one for sizable plantings seems to be *C. apiculata*, which bears relatively large, long-persistent red fruits. Slightly more refined is *C. adpressa*, and, perhaps, slightly less top-hardy. For a really prostrate, running and rooting ground cover, there is the tender-topped *C. dammeri* radicans. With all of these cotoneasters, the only satisfactory way to obtain good stands in large plantings is to put in small plants, well rooted in pots.

In places where the winters are not too severe, ground-covering effects can be obtained with the privet honeysuckle, *Lonicera pileata*, which is a top-tender, flopping plant somewhat on the evergreen side. No northern gardener would risk a large planting, even though rock gardeners in cold areas often grow the plant.

For three really hard-to-cultivate rock garden plants which make attractive coverings when suited, there are the tiny, prostrate, spreading, creeping snowberry, *Chiogenes hispidula*; the cassiope of alpine or arctic origin and the American twinflower, *Linnaea borealis americana*. The last commemorates the great Linnaeus and is a creeping evergreen limited to moist, shady soils.

The rock gardening influence shows up in plantings made in the interstices of walk or terrace flaggings. Most obvious of plants for this purpose are any one of a number of thymes. These have the desirable low stature and can withstand being walked upon. There are others which, however, do not have the spreading habits of thyme. Such plants as the spike heath, *Bruckenthalia spiculifolia*, and the wire plant, *Muehlenbeckia axillaris*, and the helianthemum, or sun rose, in variety fall into this category. The list of strictly herbaceous rock garden plants for this and the often attempted but seldom successful dry wall plantings is extensive.

When it comes to the successful treatment of walks in places where the summers are hot and dry, there is one technique which is often overlooked, and that is the planting of flopping or prostrate plants in the soil on top of such a wall so that the growth will tumble forward with interesting effect against the stonework. Clematis tangutica can be so used. So also can the cotoneasters, some of the perennial salvias and

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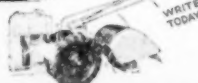
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numerous other shrubs which are somewhat out of the rock garden class as far as ultimate size is concerned.

Tumbling from the top of a wall is about the most satisfactory landscape position for such an evergreen as the coarse, spiny-leaved *Juniperus procumbens*. So located, the inevitable display of heavy branches will enhance, rather than detract from, the garden effect. The theory is that a wall does not have to be blanketed by growth to be made more pleasing in appearance.

There are a number of low-growing or prostrate junipers which lack garden value as individual plants standing alone on level ground, but which are excellent material for clothing banks and tempering the raw appearance of rocky situations. As straight bank binders, *Juniperus horizontalis douglasii*; the Bar Harbor juniper, *J. h. glauca*, and *J. chinensis sargentii* could be mentioned. On large, pasture-like roadside areas, *Juniperus communis depressa* and the Andorra juniper, *J. horizontalis plumosa*, seem more suitable. For open sandy areas, the shore juniper, *J. conferta* (liforalis), makes an interesting ground cover. It is a creeping, Japanese plant which sends up upright branchlets to present a neat carpeting. Of the lot, the shore juniper may be rated as being slightly less top-hardy. Here again, the best planting results follow the setting of relatively small plants from pots and letting the plantings grow into the desired effect during the seasons following.

CATALOGS RECEIVED.

W. B. Clarke & Co., San Jose, Calif.—Wholesale price list of evergreens and deciduous trees and shrubs; 40 pages and cover, 4x9 inches.

T. G. Owen & Son, Columbus, Miss.—Wholesale price list of evergreens and deciduous shrubs; 24 pages, 3 3/4 x 9 inches.

Whiterock Nurseries, Crockett, Tex.—Wholesale price list of pear trees; 4 pages, 4x9 inches.

Wonderland Nurseries, Ellerson, Va.—Wholesale catalog of chrysanthemums, illustrated; 32 pages and cover, 8 1/2 x 11 inches.

Neosho Nurseries Co., Neosho, Mo.—Retail catalog of fruits, flowers, nut and shade trees, shrubs and vines; illustrated in color; 40 pages, 7 1/2 x 11 inches; also price list of evergreens; illustrated; 4 pages folded, 7 1/2 x 11 inches.

Stribling's Nurseries, Merced, Calif.—Retail catalog of rosebushes, camellias, flowering trees and shrubs, evergreens, fruit trees, vines and foliage plants; illustrated, partly in color; 32 pages, 8 1/2 x 11 inches.

Tuttle Bros. Nurseries, Pasadena, Calif.—Retail price list of camellias, with description; 16 pages, 5 1/4 x 8 1/4 inches.

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Burpee, Mrs. W. Atlee, Sr.	12:33
Byers, Philip L.	10:24
Carmen, Charles A.	10:24
Casadaban, Mrs. R. J.	11:22
Cunningham, Charles F.	3:49
Ellwanger, Mrs. William B.	3:49
Gianuli, Gene	3:49
Grumbach, Otto P.	3:48
Guernsey, Ross Walter	3:48
Havnes, Mrs. L. E.	12:33
Hawkeremith, Boyd	7:84
Howland, Jens O.	3:48
Howard, Frederick H.	3:48
Jacobs, Mrs. Wallace W.	2:95
Jaenicke, Adolph M.	8:16
Leeming, William H.	11:22
McFarland, Dr. J. Horace	8:16
Pomeroy, Edward C.	3:48
Pring, Robert B.	3:49
Reid, Charles Hay, Sr.	6:66
Schroeder, Mrs. Marie D.	7:86
Smith, Charles H.	9:47
Smith, Ernest D.	9:47
Traeger, Francis	3:49
Tyler, Albert	11:22
Welch, James Clarence	1:26
Willis, Arthur E.	5:55
Wilson, Clarence H.	6:66
Youdath, Joseph F.	9:47

A. F. S. "Easi-Off" WOOD PLANT BANDS



Saves time and labor. Bands are removed without cutting; therefore the dirt ball and roots are not disturbed . . .

CAT.	Size in inches	Weight per 1000	Per 1000
No. M-310—1½ x 1½ x 2½		12 lbs.	\$4.05
No. M-320—2 x 2 x 2½		15 lbs.	4.50
No. M-340—2½ x 2½ x 3		20 lbs.	4.90
No. M-350—3 x 3 x 3		21 lbs.	5.25
No. M-360—3 x 3 x 4		32 lbs.	5.90
No. M-391—4 x 4 x 4		40 lbs.	6.95

Packed 1000 to the carton.
We do not break cartons.

LIGHT WOOD FLATS

For handling and shipping our 1½-inch and 2-inch sizes of Plant Bands.

	Per 100
M-370: holds twelve 1½-inch Bands.....	\$3.25
M-390: holds twelve 2-inch Bands.....	3.55
M-392: holds twelve 2½-inch Bands.....	4.60
M-393: holds six 3-inch Bands.....	4.30
M-394: holds six 4-inch Bands.....	5.25

Packed 100 to the carton. We do not break cartons. Shipped promptly from the factory in Michigan.

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A. M. LEONARD & SON

Piqua, Ohio

Knives — Pruning Tools
Nursery Spades — Supplies

Write for Bulletins.

CHARLIE CHESTNUT.

[Concluded from page 14.]

The milk train was due in fifteen minutes anyway so the engineer opened up the boiler and highballed for town, leaving the tree and all the members there by the track.

"No use standing here, boys," Doc says. "Let's go up to the office and have our beer and rest awhile and talk it over first." There wasn't much to talk over as everybody could see the idea was about a hundred per cent flop.

I was sitting at my desk by the door at the office looking down the nursery toward that patch by the railroad where we had been working. I seen a dense cloud of smoke, and then the whole patch broke out into a forest fire. We all tore down there on the dead run, but it wasn't no use.

"Dry as it was, that engineer should have his head examined to blow all them sparks over everything," Doc says.

Emil didn't seem at all upset by the fire. I couldn't figure it out at first, but he let the cat out. "That's going to cost the railroad company \$3,000 dollars, no I'll make it \$5,000. I'll sue the railroad," he says.

"And you can collect, too," Doc says, "We all seen what happened."

"I want you men all for witnesses when it comes up in court," Emil says.

Well, that's about the end of the story. It never come up in court as the railroad company was too smart for that. They was out to the nursery before the night was over, and they made a deal with Emil.

They agreed to bring in a bulldozer and clean off the land. And for cash Emil got \$300 dollars. Just for a little bonus Emil talked them into a free pass for him and the missus. They are going down to see her folks in Missouri as guests of the railroad.

And now Emil is in the market for some lining-out stock if any of the members should see him at the convention.

THE landscape business of Alfred J. Rummel was moved November 30 from Nutley, N. J., to Pompton Plains, N. J., where Mr. Rummel has started several acres of lining-out stock and perennials the past year. In addition to his retail and landscape business, Mr. Rummel plans to do a wholesale business in lining-out evergreens, azaleas and ilex. A 12x60-foot greenhouse is to be erected for propagating, and a new home has already been constructed on the property.

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10% cash discount for orders of **\$2,500.00** and more from now to July 1, 1949

BERBERIS ATROPURPUREA.

Red Barberry.

	Per 100	Per 1000
2-yr. trans.		
15 to 18 ins.	\$25.00	\$200.00
18 to 24 ins.	30.00	250.00

BERBERIS ATROPURPUREA.

Red Barberry.

2-yr. untr.		
10 to 12 ins.		40.00
12 to 15 ins.		60.00
15 to 18 ins.		80.00
18 to 24 ins.		100.00

BERBERIS THUNBERGI.

Green Barberry.

2-yr. trans.		
15 to 18 ins.	20.00	150.00
18 to 24 ins.	25.00	200.00

BERBERIS THUNBERGI.

Green Barberry.

2-yr. untr.		
10 to 12 ins.		30.00
12 to 15 ins.		50.00
15 to 18 ins.		60.00
18 to 24 ins.		80.00

Write for special quantity prices on 10,000 and up.

*LIGUSTRUM OVALIFOLIUM.

California Privet.

2-yr., extra-heavy cut backs.		
18 to 24 ins.	6.00	50.00
2 to 3 ft.	8.00	60.00
3 to 4 ft.	10.00	80.00

*TSUGA CANADENSIS, Specimens.

Canada Hemlock.

	Per 10	Per 100
2 to 3 ft., B&B, heavy	\$2.60	\$2.50
3 to 4 ft., B&B, heavy	3.60	3.50
4 to 5 ft., B&B, heavy	5.10	5.00

*JUNIPERUS CHINENSIS PFITZERIANA.

Pfitzer Juniper.

18 to 24 ins., B&B	2.10	2.00
2 to 3 ft., B&B	2.60	2.50

*JUNIPERUS EXCELSA STRICTA.

Greek Juniper.

18 to 24 ins., B&B	1.60	1.50
24 to 30 ins., B&B	2.10	2.00

*THUJA OCCIDENTALIS PYRAMIDALIS.

Pyramidal Arborvitae.

	Per 10	Per 100
2 to 3 ft., B&B	\$2.10	\$2.00
3 to 4 ft., B&B	2.60	2.50

*THUJA OCCIDENTALIS.

American Arborvitae.

3 to 4 ft., B&B	2.10	2.00
4 to 5 ft., B&B	3.10	3.00

*THUJA OCCIDENTALIS GLOBOSA.

Globe Arborvitae.

18 to 24 ins., B&B	1.30	1.20
24 to 30 ins., B&B	1.50	1.40

*TAXUS CUSPIDATA CAPITATA.

Upright Yew.

24 to 30 ins., B&B	4.10	4.00
30 to 36 ins., B&B	5.10	5.00
36 to 42 ins., B&B	6.10	6.00

*TAXUS CUSPIDATA.

Spreading Yew.

*18 to 24 ins., B&B	3.10	3.00
24 to 30 ins., B&B	4.10	4.00

*TAXUS HICKSI.

Hicks' Yew.

24 to 30 ins.	4.10	4.00
30 to 36 ins.	5.10	5.00

*TAXUS INTERMEDIA.

18 to 24 ins.	4.10	4.00
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*TAXUS BREVIFOLIA.

Spreading Yew.

12 to 15 ins., B&B	4.10	4.00
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*RETINOSPORA PLUMOSA.

Plumosa.

18 to 24 ins., B&B	1.60	1.50
24 to 30 ins., B&B	2.10	2.00
30 to 36 ins., B&B	3.10	3.00

RETINOSPORA PLUMOSA AUREA.

Plumosa Aurea.

18 to 24 ins., B&B	1.60	1.50
24 to 30 ins., B&B	2.10	2.00
30 to 36 ins., B&B	3.10	3.00

ACER PLATANOIDES SCHWEDLERI.

Schwedler Maple.

2-in., 8 to 10 ft.	6.10	6.00
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McINTOSH APPLE TREES.

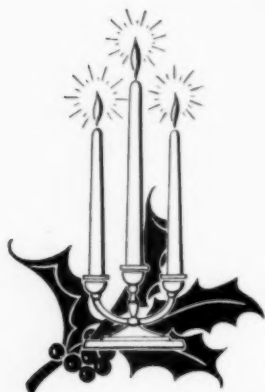
1 1/2 to 2-in., 8 to 9 ft.	2.50	2.00
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We wish to express our sincere appreciation for your patronage during the season past.

To all a very Merry Christmas and wishes for a Happy and Prosperous New Year.



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